

Third Chance to Win Pro-D Certificate—See Pages 18 and 19

Purchasing Week

McGraw-Hill's National Newspaper

OF PURCHASING

Vol. 4, No. 47

New York, N. Y., November 20, 1961

\$6 A YEAR U. S. AND CANADA \$25 A YEAR FOREIGN

Vendors Try New 'Sell-Em-the-Works' Twist

Aluminum Jockeys for Wider Markets With Distribution, Price, Tariff Moves

Mills Ease Competition With Volume Customers

New York—Major changes are developing in aluminum marketing patterns. Metal experts see recent steps—like the upward rejiggering of minimum order quantities at mill levels—as part and parcel of an over-all trend leading to:

- A rearrangement in competitive relations between aluminum suppliers.

- Fewer friction-causing commodity schedules.

- An eventual sweeping revision of aluminum price lists on a product by product basis.

The September cut of 2¢/lb. in primary ingot helped ease mill competition with some of their own volume customers, and also reduced pressure from foreign imports.

"With the easier margins," said a prominent Philadelphia extruder, "independents will be happy to buy from domestic mills. We'll be more secure on supply deliveries and we like the (Turn to page 8, column 1)

Import-Export Plan Is Middle-Road Approach

Washington — The U. S. aluminum industry offered a fresh approach to tariffs last week in an attempt to find a middle road between the free trade plans broached by the Administration and the demands for more import protection made by other domestic industries.

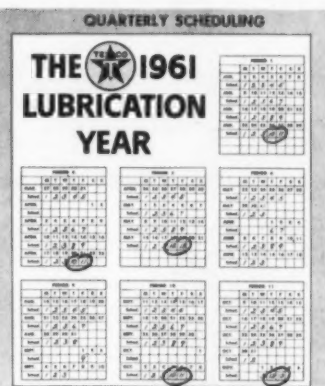
The aluminum industry plan, which was officially backed by the National Assn. of Aluminum Distributors, American Smelters Research Institute, American Die Casting Institute, The Aluminum Assn., and all major producers, is aimed at four major points in trade:

- Imports of aluminum products, primarily foil, sheet, plate, bars and rods, should be restricted on a voluntary basis with foreign producers holding themselves to "best year" figures to date and limiting themselves to gradual percentage increases of (Turn to page 4, column 1)

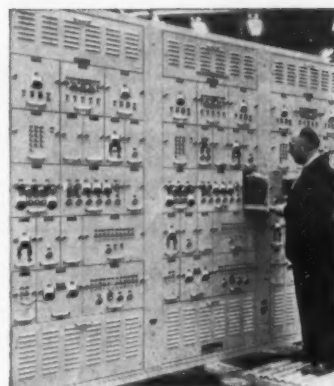
Pentagon Aims at Better Management of Supplies

Oakland, Calif. — A three-stage Pentagon drive to improve management of military supplies was described last week by Paul H. Riley, deputy asst. secy. of defense for supply & services, before the Oakland Chamber of Commerce's 15th annual Manufacturers-Purchasing Agents Dinner.

First step, Riley said, is "to secure a more accurate knowledge of our supply systems." The Defense Dept. now has \$41-billion worth of inventory stored at (Turn to page 4 column 4)



PACKAGED PRODUCTS: Calendar (l) charts plant lube program needs under Texaco systems approach (see story right). Control panel is just one component of rolling mill system built by General Electric.



Harassed Supplier Tells Buyers He, Too, Has Inventory Problems

Chicago—Inventory cutting practices of petroleum industry buyers drew both criticism and praise at the purchasing session of the American Petroleum Institute's annual meeting here last week.

- Allison R. Maxwell, Jr., president of Pittsburgh Steel Co., complained that suppliers are bearing too great a share of the oil industry's inventory load. He warned that both vendor and customer could be hit by higher costs over the long run.

Gulf, Humble Marketing Economy Grade Gasoline

Houston—Two major gasoline marketers are revamping their line (1) to meet price competition and (2) service the lower octane needs of Detroit's smaller cars.

Gulf Oil Corp. last week began moving into new areas of the country with its new economy Gulfane, which will sell at a pump price of about 2¢ or more below regular grades to meet competition of "private" brands.

In a related move, Humble Oil announced a new intermediate grade of gas that will be priced midway between its regular and premium lines.

As a result of both developments (Turn to page 31 column 2)

Systems Approach Is Designed to Wed P.A. To One Supply Source

New York—Major industrial suppliers are starting a new push to sell complete equipment packages, or systems, as opposed to a hodge-podge of individual products.

Object is to win the buyer's loyalty by giving special service and at the same time relieving him of the responsibility for tying together a wide range of different items into an integrated, workable system.

Complete package sometimes may cost more than the sum of its individual components but suppliers claim that on a true bookkeeping basis systems-buying will save the P.A. dollars and cents and headaches.

Behind today's emphasis on the package or systems approach, of course, are 1) the P.A.'s hesitation to carry anything but a barebones inventory, and 2) his hardboiled shopping around and supplier-switching. As sales strategy, the systems approach thus falls into the same general category as another recent loyalty-lure—the blanket discount (see PW Aug. 21, '61, page 1).

Here's what some major suppliers are offering:

- **General Electric Co.** has just set a new precedent for electrical equipment manufacturers by publishing prices on basic standard systems for industrial process machinery. These include such items as electric paper machine drives and reversing hot mill drives for the steel industry.

- **Oil companies**, including American, Gulf, Mobil, Sun, Texaco, and others, are pushing organized systems of industrial lubrication. Their programs are elaborate—Mobil, for instance, features a computer-scheduled (Turn to page 32 column 2)

Rate Boost Rejected

Denver—The Colorado-Eastern Rate Committee of the Rocky Mountain Motor Traffic Bureau has rejected two proposed rate increases.

One would have boosted truck tariffs 10% on all shipments between the East or Midwest and the Colorado area; the other would have hiked the rates 6% on all shipments under 10,000 lb. The issue may be reconsidered at the committee's mid-December meeting.

Purchasing Week's Panorama

- **There's Never Enough Time.** That's a frequent complaint of purchasing men, because there are so many facets to their jobs. 'Pro-D Perspective' on page 22 discusses the benefits that can accrue from a study of how buyers spend their time.

- **There's a Cloud in the Background** of an otherwise rosy economic picture. The cloud is unemployment, and its presence is giving a great deal of concern to many economists. See the P/W indicator analysis on page 21 for details.

- **Gift Giving Goes on Despite Top-Level Frowns**, and business gift specialists expect a record Yuletide of corporate generosity. The report on page 15 notes that the average gift will cost \$9.10, with gift certificates and liquor popular.

- **Products of Tomorrow Now in the Lab** include a resinous moisture resistant masonry primer, a digital computer 6-in. square, and ultra-precision measuring instruments based on the Laser principle. See 'R&D Perspective' on page 25.

Monkey Shines

Troy, N. Y.—Novel uses for coated abrasives are an old story to manufacturers, but Behr-Manning Co., a division of Norton Co., was a bit bewildered by small orders for "Tufbak Durite," a high-grade silicon carbide paper, from the medical school of a large Eastern university.

A recent letter cleared the air. The university wrote that the sandpaper, in 13 grits from 80 through 600, is being used in a research project to learn how accurately monkeys can distinguish differences in surface roughness.

Purchasing Week's

Purchasing Perspective

Suppliers' increasing efforts to lure customers with a complete soup-to-nuts menu featuring a variety of integrated products with attractive cost and supply advantages (see story above) could provoke a shift in some buying patterns.

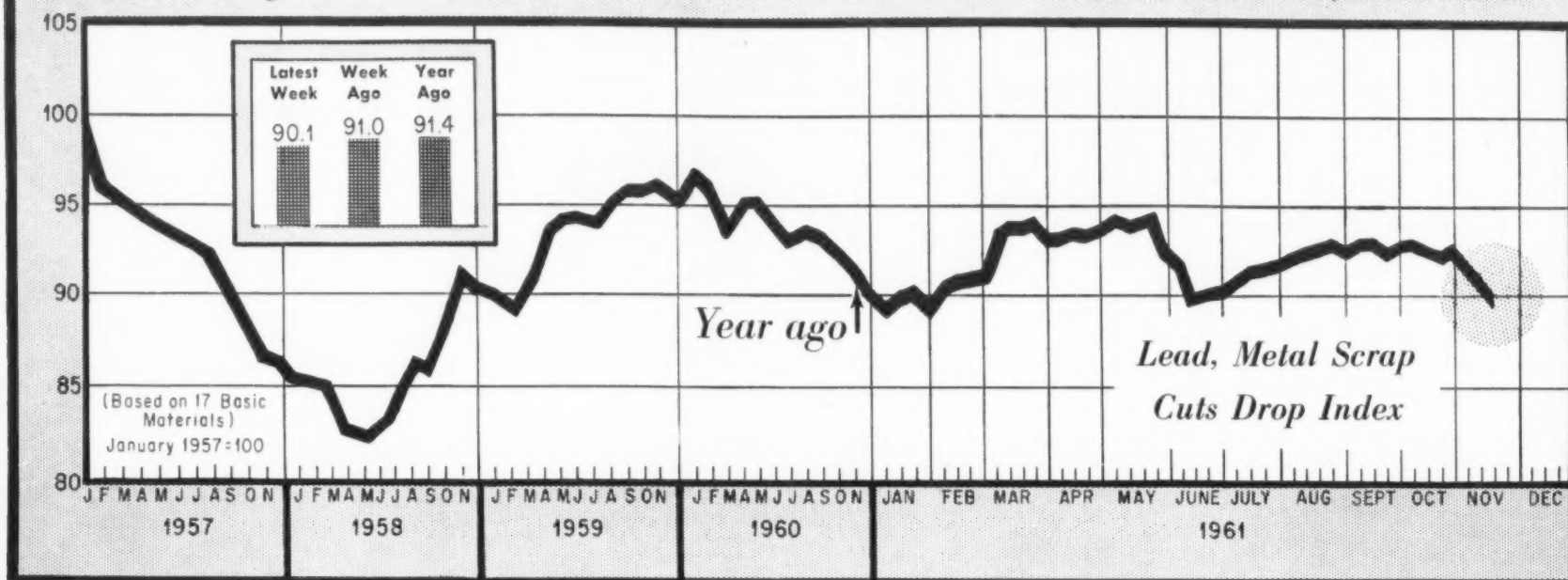
Suppliers are seeking customer loyalty—stated another way, that means repeat business. But many buyers resist the suggestion that they become wedded to single sources, arguing that by ordering a la carte they can better meet special needs and at a probable lower initial price.

At any rate, this is other tipoff as to the future pitch of salesmen when they come to call. They'll be offering more "packaged" products as a lure that may be hard to resist.

Another phase of the marketing problem is that no matter (Turn to page 31, column 4)

Purchasing Week Industrial Materials Price Barometer

This index, based on 17 basic materials, was especially designed by the McGraw-Hill Department of Economics.



This Week's Commodity Prices

	Nov. 15	Nov. 8	Year Ago	% Yrly Change
METALS				
Pig iron, Bessemer Pitts., gross ton	67.00	67.00	67.00	0
Pig iron, basic, valley, gross ton	66.00	66.00	66.00	0
Steel, billets, Pitts., net ton	80.00	80.00	80.00	0
Steel, structural shapes, Pitts., cwt.	5.50	5.50	5.50	0
Steel, structural shapes, Los Angeles, cwt.	6.20	6.20	6.20	0
Steel, bars, del., Phila., cwt.	5.98	5.98	5.97	+ .2
Steel, bars, Pitts., cwt.	5.675	5.675	5.675	0
Steel, plates, Chicago, cwt.	5.30	5.30	5.30	0
Aluminum, pig, lb.	.24	.24	.26	- 7.7
Secondary aluminum, #380 lb.	.212	.212	.23	- 7.8
Copper, electrolytic, wire bars, refinery, lb.	.306	.306	.296	+ 3.4
Brass, yellow, (sheet) lb.	.493	.493	.493	0
Lead, common, N.Y., lb.	.10	.105	.12	-16.7
Nickel, electrolytic, producers, lb.	.813	.813	.74	+ 9.9
Tin, Straits, N.Y., lb.	1.231	1.226	1.026	+20.0
Zinc, Prime West, East St. Louis, lb.	.115	.115	.13	-11.5
FUELS				
Fuel oil #6 or Bunker C, Gulf, bbl.	2.20	2.20	2.30	- 4.3
Fuel oil #6 or Bunker C, N.Y., barge, bbl.	2.62	2.62	2.62	0
Heavy fuel, PS 400, Los Angeles, rack, bbl.	2.10	2.10	2.05	+ 2.4
Lp-Gas, Propane, Okla., tank cars, gal. (incl. discount)	.035	.035	.045	-22.2
Gasoline, 92 oct. reg., Chicago, tank car, gal.	.11	.11	.126	-12.7
Gasoline, 84 oct. reg., Los Angeles, rack, gal.	.108	.108	.105	+ 2.9
Kerosene, Gulf, Cargoes, gal.	.098	.095	.09	+ 8.9
Heating oil #2, Chicago, bulk, gal.	.093	.093	.095	- 2.1
CHEMICALS				
Ammonia, anhydros, refrigeration, tanks, ton	94.50	94.50	94.50	0
Benzene, petroleum, tanks, Houston, gal.	.31	.31	.34	- 8.8
Caustic soda, 76% solid, drums, carlots, cwt.	4.80	4.80	4.80	0
Coconut oil, inedible, crude, tanks, N.Y. lb.	.123	.123	.143	-14.0
Glycerine, synthetic, tanks, lb.	.248	.248	.293	-15.4
Linseed oil, raw, in drums, carlots, lb.	.188	.188	.159	+18.2
Phthalic anhydride, tanks, lb.	.15	.15	.185	-18.9
Polyethylene resin, high pressure molding, carlots, lb.	.275	.275	.275	0
Polystyrene, crystal, carlots, lb.	.18	.18	.215	-16.3
Rosin, W.G. grade, carlots, fob N.Y. cwt.	13.15	13.15	18.10	-27.3
Shellac, T.N., N.Y. lb.	.31	.31	.31	0
Soda ash, 58%, light, carlots, cwt.	1.55	1.55	1.55	0
Sulfur, crude, bulk, long ton	23.50	23.50	23.50	0
Sulfuric acid, 66% commercial, tanks, ton	22.35	22.35	22.35	0
Tallow, inedible, fancy, tank cars, N.Y. lb.	.055	.055	.06	- 8.3
Titanium dioxide, anatase, reg. carlots, lb.	.255	.255	.255	0
PAPER				
Book paper, A grade, Eng finish, Untrimmed, carlots, cwt.	17.75	17.75	17.75	0
Bond paper, #1 sulfite, water marked, 20-lb, 16-carton lots, cwt.	25.20	25.20	25.20	0
Chipboard, del. N.Y., carlots, ton	100.00	100.00	100.00	0
Wrapping paper, std. Kraft, basis wt. 50 lb rolls	9.50	9.50	9.50	0
Gummed sealing tape, #2, 60 lb basis, 600 ft. bundle	6.30	6.30	6.30	0
BUILDING MATERIALS				
Cement, Portland, bulk carlots, fob New Orleans, bbl.	3.65	3.65	3.65	0
Cement, Portland, bulk carlots, fob N.Y., bbl.	4.20	4.20	4.20	0
Southern pine, 2x4, s4s, trucklots, fob N.Y., mftbm.	107.00	107.00	118.00	- 9.3
Douglas fir, 2x4, s4s, carlots, fob Chicago, mftbm.	123.00	123.00	132.00	- 6.8
Spruce, 2x4, s4s, carlots, fob Toronto, mftbm.	83.00	83.00	82.00	+ 1.2
Fir plywood, 1/4" AD, 4x8, dealer, crld, fob mill, msf.	60.00	60.00	68.00	-11.8
TEXTILES				
Burlap, 10 oz. 40", N.Y., yd.	.139	.138	.140	- .7
Cotton middling, 1", N.Y., lb.	.357	.357	.323	+10.5
Printcloth, 39", 80x80, N.Y., spot, yd.	.178	.178	.180	- 1.1
Rayon twill, 40 1/2", 92x62, N.Y., yd.	.21	.205	.22	- 4.5
Cotton drill, 1.85, 59", 68x40, N.Y., yd.	.375	.375	.36	+ 4.2
Wool tops, N.Y., lb.	1.620	1.625	1.490	+ 8.7
HIDES AND RUBBER				
Hides, cow, light native, packers, Chicago, lb.	.215	.215	.155	+38.7
Rubber, #1 std ribbed smoked sheets, N.Y., lb.	.274	.275	.311	-11.9

(Price sources include: Coal Age, E&MJ Metal and Mineral Markets, Engineering News-Record, Platts Oilgram Price Service.)

Purchasing Week's

Price Perspective

PRICE JITTERS—Copper is joining the growing list of sensitive commodities where prices are turning easier.

The precarious position of the red metal was underscored last week when two relatively minor labor settlements (in Chile and in Perth Amboy, N. J.) were enough to drop prices in both the scrap and futures markets.

The decline in futures (1/2¢ below week-earlier levels) is pretty good indication that the experts and speculators are betting on continued price shakiness over the next few months.

While labor may have been the immediate cause behind the new declines, most copper people see world glut and lackluster demand as the underlying factors. On the supply side, for example, a new Copper Institute report shows world holdings of refined stocks at the beginning of the month up to 413,000 tons—close to 7,500 tons over month-earlier levels.

Brass mills (a major copper user) point up the disappointing demand picture. They note incoming orders this month will probably be somewhat below October. And the feeling among major mills is that December may be even lower yet as many users pare stocks for tax purposes.

However, inventories of brass mill customers are close to rock bottom. And officials see a moderate buildup next year both (1) as a hedge against copper labor trouble around midyear; and (2) to meet expanding production needs.

INTERNATIONAL METAL AGREEMENTS—Current weakness in nonferrous metals is again spurring demand for world marketing pacts that would, in effect, put cartel-like controls on both prices and production.

● **IN ALUMINUM**—Aluminum Assn. spokesmen are now asking for a government negotiated system of trade pacts among nations (see story page 1). Aim is to permit a more orderly world marketing pattern—one which would eliminate the cutthroat competitive pricing which still is prevalent in much of the industry.

● **In copper**—Sen. Mansfield is renewing his drive for a world copper pact. The Interior, Justice, and Commerce Depts. have been wrestling with this problem for months. But Sen. Mansfield thinks they've been dragging their feet and intends "to find out what the results have been."

● **In lead**—Metalmen expect to see renewed clamor for international lead restrictions if prices continue to sag. They observe that the voluntary cutback program, which was reaffirmed at the recent Lead and Zinc Study Group in Geneva, doesn't seem to be too effective. Stocks this year, for example, went up by about another 81,000 tons.

Experts see little chance of any quick action on any of the above proposals. Differences between producing and consuming nations, plus chances of running afoul of U. S. antitrust laws, make any such agreement a long-term possibility at best.

TARIFFS AND PRICES—Economists are already busy evaluating the possible price effects of proposals to reduce U. S. trade barriers.

Consensus is that such action would tend to:

● **Put a stronger damper on inflation.** Reduction of tariffs and the tightening of the "escape clause" provision (which allows industries hurt by imports to seek quota or tariff protection) are bound to increase the inflow of low-priced imports. This, in turn, would provide a stiff deterrent to the posting of price increases by domestic suppliers.

● **Reduce price volatility.** As one price analyst puts it: "The free exchange of goods between nations would permit an accelerated flow of goods from glut to famine areas. This would lessen supply-demand imbalances, and thereby cut down on the amplitude of price fluctuations."

Second Price Slash in Two Weeks Drops Lead Tags to 15-Year Low

New York—Continued weakness abroad, coupled with buyer restraint, last week brought about the second ½¢/lb. cut in lead prices in less than two weeks. The new price of 10¢/lb. (N.Y.) puts tags at a 15-year low—and 17% under the price of a year ago.

Lead scrap and lead product prices also are turning lower in line with the decline in the basic metal. For example:

• **Lead scrap**—Smelters have reduced their buying prices by ½¢/lb.—to keep costs in line with the new 10¢/lb. price for primary lead.

• **Lead oxides**—Reductions of ½¢/lb. were posted for dry red lead (down to 13¾¢, local), litharge (down to 13¼¢, local), and orange mineral (down to 16¢, local).

• **Sheet and pipe**—A ½¢/lb. drop put these products down to the 15½¢/lb. level.

The wide spread between the London and U.S. price was one of the major factors behind the latest decline. As a rule of thumb, whenever the overseas price is more than 2½¢/lb. below the American quote, domestic prices weaken.

Last week's domestic price decline again proved the accuracy of this rule. Prices in London before the latest decline were more than 3¢/lb. below the domestic ones. Result: Prices dropped ½¢/lb. here, leaving the differential just a shade over 2½¢.

The reluctance on the part of the consumers to buy after the first ½¢/lb. cut (on Nov. 1) also helped contribute to the latest decline. Most buyers—looking at hefty stockpiles and the huge

U.S.-London price differential—felt that the earlier cut wasn't enough, and chose to wait on the sidelines until prices dropped again.

Now that the expected decline has materialized, the outlook is for some step-up in purchasing, since experts feel there is little chance of the price falling any lower. But again, just how strong the pickup will be, depends, in large extent, to the trend in overseas quotations.

This Week's Scrap Prices

	Nov. 15	Nov. 8	Year Ago	% Yrly Change
Steel, #1 hv, divd Pin, ton.....	34.00	34.00	27.00	+25.9
Steel, #1 hv, divd Clev, ton.....	32.00	32.00	25.00	+28.0
Steel, #1 hv, divd Chic, ton.....	29.00	30.00	25.00	+16.0
Copper, #1 wire, dlr buy, fob NY, lb.....	.235	.235	.220	+6.8
Copper (hv) & wire mix, dlr buy, fob NY, lb.....	.215	.215	.200	+7.5
Brass, light, dlr buy, fob NY, lb.....	.12	.12	.10	+20.0
Brass, hv yellow mix, dlr buy, fob NY, lb.....	.145	.145	.118	+22.9
Alum (cast), mixed, dlr buy, fob NY, lb.....	.09	.09	.09	0
Alum (sheet), old clean, dlr buy, fob NY, lb.....	.09	.09	.085	+5.9
Zinc, old, dlr buy, fob NY, lb.....	.03	.03	.04	-25.0
Lead, soft or hard, dlr buy, fob NY, lb.....	.07	.07	.078	-.7
Rubber, mix auto tires, divd Akron, ton.....	11.00	11.00	11.00	0
Rubber, synth butyl tubes, East, divd, lb.....	.073	.07	.065	+12.3
Paper, old corrug box, dlr, Chic, ton.....	18.00	18.00	18.00	0
Paper, #1 mixed, dlr, NY, ton.....	3.00	3.00	1.00	+200.0
Polyethylene, clear, dlr, NY, lb.....	.04	.04	.10	-60.0

Natural Gas Pipeline Co. Applies for Capacity Hike

Chicago—Natural Gas Pipeline Co. of America filed an application with the Federal Power Commission for authority to increase its daily delivery capacity by 95-million cu. ft. to 1,755-billion cu. ft.

George P. Garver, president of Natural Gas Pipeline, a subsidiary of the Peoples Gas Light and Coke Co., said the \$27-million project is planned for 1962 construction. The proposed expansion includes 224 miles of large-diameter pipeline, and about 16 miles of lateral lines.

Price Briefs

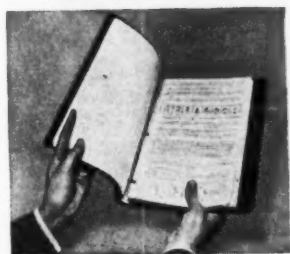
Maleic anhydride—Monsanto and Heyden Chemical initiated a 1¢/lb. reduction in maleic anhydride tags. The new tankcar price is 21½¢/lb. Production capacity has far outstripped demand in this chemical.

Fumaric acid—Overproduction also caused a ½¢/lb. cut in fumaric acid by the same two companies, bringing carlot quotes to 23¾¢/lb. in 250-lb. containers and 22¼¢/lb. bagged.

Polyester resins—Lower phthalate prices plus the cuts in maleic anhydride and fumaric—all important production intermediates—are increasing the pressure on polyester resin prices to follow the recent ½¢/lb. cut in alkyd resins.

Building materials—Roof insulation will be cut \$6 to \$80/1000 sq. ft. by Allied Chemical's Barrett Div. on Nov. 24. Armstrong Cork kicked off an industry-wide cut—ranging from 2.6% to 11.5%—on vinyl-asbestos tile. Kentile also reduced its price for asphalt tile by 3.3%.

Selenium—Canadian Copper Refiners, Ltd. kicked off a 75¢/lb. tag reduction for selenium. Commercial grade is now \$5.75/lb. and the 99.99% electronic grade is \$6.75/lb.



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Aluminum Industry Forges New Tariff Approach

(Continued from page 1)
the U. S. market as consumption rises.

• Foreign aluminum producers would get U. S. technological and marketing assistance in diversifying their products and aiming at a broader scope in U. S. sales rather than one-product saturation in limited areas.

• U. S. exports of aluminum ingots should get better treatment in countries that do not have enough ingot production but put stiff tariffs on ingot imports. The U. S. aluminum industry would help these countries develop new markets for local aluminum fabricators (i. e. tropi-

cutting back on imports but regulating them on a voluntary basis to hold to scheduled percentage increases of the U. S. market growth, coupled with the idea of U. S. industry helping foreigners spread their U. S. sales around by diversification and opening new markets, is believed to be more appealing than the traditional tariff and quota system used in the past.

One Shot Problem

The aluminum industry is worried about erratic one-shot imports where foreign producers flood one product in a single area, beating out most United States competition. The example of circles (used in utensil ware) was given to prove the industry's "disorderly imports" gripe. European manufacturers of aluminum circles have captured 80% of the Northeastern Seaboard market in the U. S., and 25% of the entire U. S. market.

Similar, but less spectacular examples are given for foil, sheet, plate, rods and bars.

In U. S. government purchasing, the U. S. aluminum industry claims it is taking a real beating. It says special uses of aluminum

are developed by the U. S. industry for the military and are then pounced on by foreign, low-cost producers. The big U. S. buyer for aluminum right now is the Navy. The Navy is redesigning its ships in the active fleet to have aluminum deck housing and top-side equipment to lessen top-heaviness caused by increasing electronic and rocketry installations that traditionally are housed in steel.

U. S. aluminum sheet and special alloy aluminum also are being bought in large quantities for aircraft repair. Until now, U. S. aluminum producers claim, the only military market open was special alloy for aircraft. Now, European companies are beginning to enter that.

Taking a Close Look

Administration officials are taking more than a routine look at this plan. The part about stimulating diversification and new markets is appealing, Administration spokesmen say, but the U. S. aluminum industry claim that it should have even greater "buy American" protection in military purchasing won't have much of a chance.

Drug Firms Get Clean Bill of Health In Pricing Policies on Tetracycline

Washington—Six leading drug companies have won an important victory over federal antitrust charges in a Federal Trade Commission examiner's opinion finding "substantial price competition in the hospital markets" for tetracycline, a leading wonder drug.

In a 195-page report, examiner Robert L. Piper exonerated the six companies, charged with manufacturing tetracycline under an illegally held patent and with conspiring to rig prices for the broad spectrum antibiotics.

The six companies are American Cyanamid Co., Bristol-Myers Co. and its subsidiary, Bristol Laboratories, Inc., Chas. Pfizer and Co., Olin Mathieson Chemical Corp. (Squibb), and the Upjohn Co.

Piper's ruling is by no means final. It undoubtedly will be taken up by the full FTC, and possibly from there appealed to the courts.

Piper's opinion was that work performed by Pfizer scientists in learning the nature and structure of aureomycin and terramycin was original and necessary to the development of tetracycline. Even

though there is similarity in the structures of tetracycline and the earlier wonder drugs, Piper said, development of tetracycline was by no means obvious without the knowledge developed by Pfizer.

Piper examined the wonder drug market and reached the basic finding that although there is similarity in published prices, this is no evidence of price fixing. He found considerable evidence of price competition for the orders of big purchases, and no collusive agreements to fix prices.

Many Brands

Big buyers of tetracycline are price conscious, he said, because they know that all brands of tetracycline are essentially the same. Tetracycline is sold as: achromycin, achromycin V, achrostatin and achroclidin (Cyanamid); polycycline and tetrax (Bristol); tetracylin, tetracylin V, tetrabon, tetrabon V, tetracydin, sigmamylin and signemycin (Pfizer); stecclin, mystecclin, mystecclin V and sumycin (Olin Mathieson), and panmycin, panmycin phosphate, comycin and panalba (Upjohn).

"While the published prices to (private and tax-supported) hospitals were respectively uniform, larger institutions frequently secured lower prices as a result of dealer bids, free goods and other competitive offers," Piper said.

Price competition for federal business drove the price of tetracycline down from \$24.22 less 2% in 1954 to \$17.24 per 100 capsules in 1958, Piper said.

"The record also established a substantial shift of shares of the tetracycline market from Cyanamid and Pfizer to Bristol, Squibb, and Upjohn," he said. "This fact, coupled with the evidence revealing extensive price competition in the hospital markets, leads logically to an inference that no price-fixing conspiracy existed among the companies."

Pentagon Pressing for Improved Management of Material Supplies

(Continued from page 1)
hundreds of installations throughout the world with detailed records kept at 54 "inventory control points."

Riley said that 160 military depots process 100-million stock receipt and issue transactions annually. In attempting to streamline operations at these facilities, he said, the goal is to "avoid tying up dollars, warehouse space, and transportation unnecessarily."

The Pentagon official said the second step in the drive is to set more uniform supply policies and practices among military

agencies—for example, the level of inventories to be maintained at individual depots. Right now, Riley said, the days of supply set "to accomplish similar supply support objectives for similar items vary as much as 100% among the inventory control agencies."

Requisitioning

Another need for uniformity, said Riley, is in the area of requisitioning and issue systems. At present, the 750,000 daily military supply transactions are handled through 16 different requisitioning and shipping invoice systems. By next July, as a result of installation of computers and retraining of personnel, there will be one standard requisitioning and one standing shipping invoice system.

Third stage in the Pentagon's drive to upgrade supply management, Riley said, has been aimed at reorganizational efforts. The General Services Administration, for instance, has taken over from the military supply responsibility for over 45,000 items "that are stable from an engineering viewpoint, are not related to primary weapons, and do not require stockage in mobilization reserve depth." Purchasing responsibility for about 150,000 more items will be shifted to General Services in the next two years.

Riley said the new Defense Supply Agency, which is taking over purchasing and management of more specialized common-use military goods from individual services, will eventually control an inventory of 1.2-million items—nearly one-third the goods bought by the military. DSA will ultimately manage an inventory worth about \$21-billion.

CAB Asked to Rescind CL-44 Jet Cargo Rates

Washington—American Airlines has asked the Civil Aeronautics Board to rescind freight rates based on operation of the new jet-powered CL-44 cargo plane until a substantial volume of CL-44 flights have been flown.

The request is aimed at upsetting a new air cargo tariff which the CAB recently allowed the Flying Tiger line to put into effect. Flying Tiger filed its tariff, incorporating a wide range of rate reductions, in anticipation of operating economies to be provided by the bigger and faster plane.

American said it now appears the CL-44 may not go into operation until next spring. Flying Tiger is using the jets, but on military shipments, not domestic cargo flights.

American claimed it and other airlines had been "goaded" into meeting the new Flying Tiger rates. As a result, American said, "The entire industry has rates derived from economies promised by an airplane that is not operating."

It asked the CAB to "take whatever action is necessary to prevent the use of rates that are substantially below those previously in effect until the CL-44 service is operated."

Two Firms Plead Guilty To Conspiracy Involving Carbon Dioxide Prices

New York—Air Reduction Co. and General Dynamics Corp. have pleaded guilty to charges of conspiring to fix carbon dioxide prices. Four executives of the two firms entered *nolo contendere* (no contest) pleas.

Two other firms—Olin Mathieson Chemical Corp. and Chemetron Corp.—pleaded not guilty. Their trial is expected to start this week in federal court here.

The four firms were charged with violating a 1952 consent decree which followed an earlier antitrust action. The government charged that within a year of the decree, the firms were again conspiring to fix prices.

The 1952 decree applied to Air Reduction and Liquid Carbonic Co., later purchased by General Dynamics. Chemetron and Olin Mathieson were not parties to the decree, but the government contends they are subject to its provisions.

The four firms involved in the case sold 80% of the nation's carbon dioxide last year, the government said. Air Reduction and General Dynamics face possible fines, while the four officials who pleaded no contest face fines or jail sentences or both.

GE Gets Backing in Fight To Balk Consent Decree

Philadelphia — General Electric Co. has received support from four utilities firms in its battle against signing a consent decree in the electrical price-fixing case.

The Justice Dept. wants GE to pledge it won't rig bids or fix prices and, in addition, that it won't slash prices so drastically as to harm smaller manufacturers.

GE is balking about the terms and has won support from the utilities, which said such a decree would "deprive them of the benefits of free competition." The utilities were the Pennsylvania Power & Light Co., Cleveland Electric Illuminating Co., Long Island Lighting Co., and American Electric Power Co.

The action is an outgrowth of the government's criminal antitrust suit against GE and 28 other firms convicted of rigging bids and prices on electrical equipment.

So far, only one consent decree has been approved in the case—by C. H. Wheeler Mfg. Co. Four others are pending.

NAD Discusses Imports

Phoenix, Ariz.—The national Assn. of Aluminum distributors examined the import problem at its annual convention here last week. Alfred T. Fortier, president, told the 243 delegates "the import situation has not improved and the impact of foreign metal is being felt in more and more trading areas as time goes along."

"This situation, I am afraid, will plague us for some time to come. But we cannot turn our backs to the problem; it is becoming too potent a force," he said.

Fortier also urged greater cooperation between the mill suppliers and the distributors. He said the suppliers expect distributors to start selling a large share of the market—30% to 35% instead of the present 16%—and urged distributors to find "new ways of merchandising our product" so they can handle their share.

cal roofing, canning, electrification, irrigation aluminum uses).

• Better share for U. S. aluminum producers in U. S. military purchasing. The industry claims 94% of all aluminum orders in military purchasing are going to foreigners in bidding where foreigners participate. There is the usual 6% (12% for depressed areas "buy American" spread protection for U. S. bidders) but industry spokesmen claim this isn't enough and isn't working. A protection of from 12% to 24% is being sought.

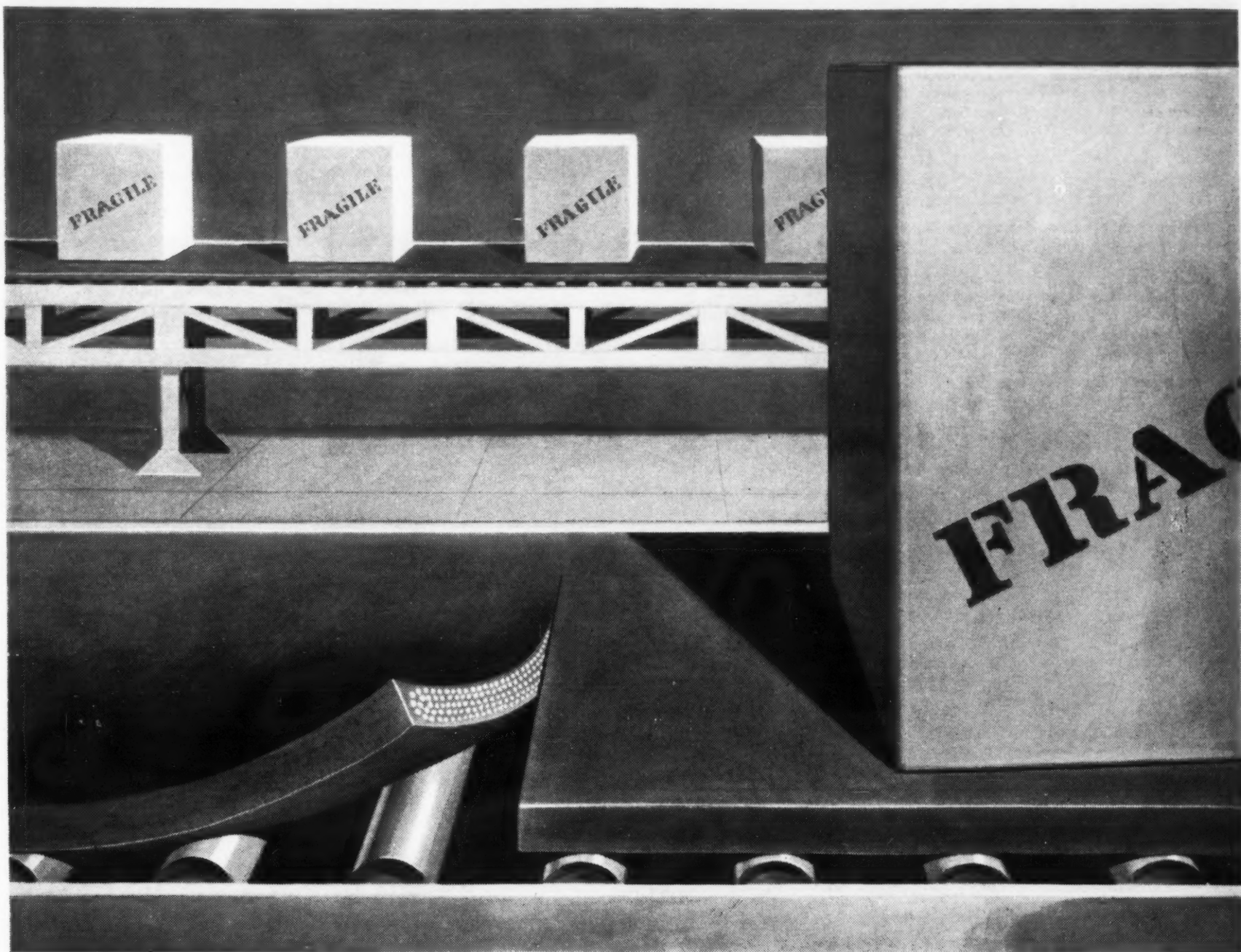
Aluminum industry men frankly feel there won't be much of a chance for the higher tariff approach next year with the winds of free trade blowing through the Administration. The idea of not

Weekly Production Records

	Latest Week	Week Ago	Year Ago
Steel ingot, thous tons	2,046	2,044	1,468
Autos, units	160,497	161,320*	145,236
Trucks, units	25,392	27,352*	21,975
Crude runs, thous bbl, daily aver	8,079	7,834	7,717
Distillate fuel oil, thous bbl	13,639	13,504	12,718
Residual fuel oil, thous bbl	5,856	5,499	5,393
Gasoline, thous bbl	27,977	28,116	27,051
Petroleum refineries operating rate, %	81.2	78.8	78.9
Container board, tons	172,268	193,841	167,821
Boxboard, tons	101,956	95,044	98,261
Paper operating rate, %	95.4	94.7*	91.8
Lumber, thous of board ft	218,099	237,160	213,082
Bituminous coal, daily aver thous tons	N. A.	1,498	1,321
Electric power, million kilowatt hours	15,520	15,396	14,111
Eng const awards, mil \$ Eng News-Rec	533.7	255.4	473.6

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Purchasing Week's Washington Perspective

Business is on the rise—but apparently not so sharply as the Administration had hoped. This cautious estimate came clear last week at the 39th Annual National Agricultural Outlook Conference in Washington. Economists, in and out of government, talked about business prospects for the next year. Chief points:

- There are no real shortages in view, either in raw materials or finished goods; most industries are operating at considerably below capacity.

- Price increases will be moderate; higher productivity should even lead to some price cuts, certainly to better quality products and the marketing of new products.

- A large inventory accumulation is expected in the first half of 1962, in response to fear of price increases following out of labor negotiations in the steel industry, or even a strike that would temporarily cut off supplies. On the other hand, a reduction in inventory may occur in the last half.

Government economists now see the possibility of a 7% to 8% rise in Gross National Product next year. The exact extent of the rise, they concede, depends on consumer demand for durables and the strength of capital investment.

Louis Paradiso, a respected Commerce Dept. economist, has a slightly different view from most on consumer spending. He notes that third-quarter consumer spending was at 93% of disposable personal income, about the same as a year ago.

The difference is a shift in buying patterns, away from purchase of goods and toward purchase of services. In 1959, consumer spending for services accounted for 39¢ out of each dollar; today it accounts for 42¢. Paradiso sees this trend continuing until 1965.

For the near-term, Paradiso has some doubts about a seven-million auto market next year; the basic strength of the market is yet to be tested. But he does see some rise in furniture sales, both because of higher incomes and a faster rate of residential construction.

Business outlays for new plant and equipment is another big "if" in all economic forecasts. Some rise is expected (the McGraw-Hill survey places it at 4% next year), but businessmen are not programing really large increases for capital spending.

Without a large and sustained advance in capital goods expenditures, says

Paradiso, the U. S. cannot achieve full employment or a more rapid economic growth than that of the past few years.

The fate of all controls on oil imports is in serious question.

Interior Secy. Stewart Udall is advocating a reduction of about 50,000 bbl./day in crude oil imports. But the proposal is getting a cool reception from other federal agencies, notably the Defense and State Depts.

As a result, White House aides have asked the Interior Dept. to justify not only the proposed cut but continuation of any controls at all. Assistant Secy. John M. Kelly, a proponent of the curbs, says they face "a very serious challenge."

Top-level White House discussions on the subject are slated for the next week or two. The decision now is completely in President Kennedy's hands.

Domestic political pressure to accede to Udall's request is intense and may overshadow Defense Dept. pleas that controls inflate costs of oil purchases and State Dept. arguments that controls disturb U. S. relations with Venezuela.

More oil and lower prices may be the eventual result of a cold-war struggle. Sen. A. S. Mike Monroney (D-Okla.) pinpointed the issue last week when he noted that Russia is using cut-rate oil to finance foreign purchases of the tools and items it needs to build its economy.

American producers must meet Soviet prices, Monroney says. To do so, he advocates tax concessions to domestic oil companies so that they may have an incentive to find and develop new reserves.

What Monroney is urging is an extension of depletion allowances, already under attack from a number of sources. Under present circumstances, the best the oil industry can hope for in this area is maintaining current allowances.

Truckers are pressuring for an increase in size and weight of trucks allowed on federal-aid highways. What they want is permission to carry more freight per load.

Officials of the American Trucking Assns. complain that though truckers make a substantial financial contribution to the highway program they are not realizing full value from the roads. In addition to bigger and heavier trucks, they propose a new road classification system so that they will not be held captive by limits on older highways.

The Bureau of Public Roads will recommend a new size and weight policy to Congress next year, based largely on findings of the Ottawa, Ill., road test of the American Assns. of State Highway Officials.

The bureau will recommend either continuation of existing federal limitations, a new set of federal standards, or repeal of federal limits with a return of size-weight controls to the states. AASHO favors the last course, but is not likely to get its wish.

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Empire State Chamber of Commerce—3rd
Annual Workshop, Hotel Sheraton-Ten Eyck, Albany, N. Y., Dec. 5.

Eastern Joint Computer Conference—Sheraton-Park Hotel, Washington, D. C., December 12-14.

2nd Annual Conference on Containerization & Packaging—Skytop Room, Statler Hilton Hotel, N. Y. City, Jan. 18.

American Management Association—Hotel Astor, New York City, Jan. 31-Feb. 2.

American Chemical Society—National Meeting, Washington, D.C., March 20-29.

PREVIOUSLY LISTED

DECEMBER

International Visual Communications Congress—Biltmore Hotel, Los Angeles, Dec. 2-5.

9th Plastic Film, Sheet and Coated Fabrics Conference—Pierre Hotel, New York, Dec. 7-8.

JANUARY

Automotive Engineering Congress and Exposition—Cobo Hall, Chicago, Jan. 8-12.

Southern Industrial Distributors' Association
—Annual Midyear Meeting, Shamrock Hotel, Houston, Tex., Jan. 21-23.

1962 Plant Engineering and Maintenance Show—Convention Hall, Philadelphia, Jan. 22-25.

Electrical Engineering Exposition—New York Coliseum, New York City, Jan. 29-Feb. 2.

FEBRUARY

NAPA, Public Utility Buyers Group—Annual Conference, February 4-6.

Gravure Technical Association Convention—Hotel Commodore, New York City, Feb. 26-March 1.

MARCH

Institute of Radio Engineers International Convention—New York City, March 26-29.

APRIL

1962 Indiana Industrial Show—Manufacturers Building, State Fair Grounds, Indianapolis, April 4-6.

American Management Association—31st National Packaging Exposition, New York City, April 9-12.

American Society for Metals Regional Conference and Exhibition—Shamrock Hilton Hotel, Houston, April 17-19.

Western Space Age Industries Exposition and Conference—Cow Palace, San Francisco, April 25-29.

Warfare on Price Fixing to Continue, Attorney General Kennedy Promises

New York — Atty. Gen. Robert F. Kennedy equates price fixing with racketeering, and believes guilty individuals deserve "as severe punishment as the courts deem appropriate."

He told the Economic Club of New York last Monday that he opposes immunity for individuals involved in price fixing and bid rigging frauds. Fines for their companies aren't enough, he said, but "those responsible should be held responsible."

Following up a recent press conference comment of his brother, President Kennedy, the Attorney General indicated that his department will not go easy on enforcement of the antitrust laws merely to slough off the "antibusiness" tag that has been hung on the Kennedy Administration.

Robert Kennedy sought to convince the businessmen that the "antibusiness" charge against the Administration is false. But he proffered no letup in antitrust enforcement, and defended antitrust activity as probusiness rather than antibusiness.

"I believe firmly that the purpose of the antitrust laws is to protect and promote the competitive interests of business—small and large—as well as to protect the public," he said.

Business Starts Most Actions

Between May and September, Kennedy said, nearly 300 of 439 antitrust complaints received by the Justice Dept. have come from businessmen, covering "every conceivable commodity," including concrete pipes, corrugated boxes, rock salt, waste paper, drugs, milk, and meat.

"The list demonstrates that there is probably no area of the business community which at one time or another has not sought the department's assistance," Kennedy said. He regretted that those who have sought the protection of the Justice Dept. haven't been more "articulate" in defending its activities.

Kennedy conceded that there can be confusion about the application of some antitrust provisions, where honest differences over the laws and economics are involved. Where these differences arise, as in merger cases, Kennedy pointed out that his department is willing to discuss problems and advise individual companies of its positions.

But with price fixing and bid rigging conspiracies "we are talking about clear cut questions of right and wrong," Kennedy said.

"I view the businessman who

engages in such conspiracies in the same light as I regard the racketeer who siphons off money from the public in crooked gambling or the union official who betrays his union," he said.

Wherever price-fixing cases have been completed, he said, "prices to the consumer have dropped, and the competitors, who were not involved in the conspiracy, have received a new lease on life and can begin to do business again."

Pentagon Broadening Regs to Encourage VA

Washington — The Pentagon has disclosed that value analysis (value engineering) provisions in the Armed Services Procurement Regulations will be broadened to encourage government contractors to use value analysis techniques.

James N. Davis, deputy assistant secretary of defense for production, said last week that the Pentagon also will set up an industry advisory group on value analysis and that the Defense Dept. will publish a value analysis manual to promote greater

application of the cost-cutting technique among firms with which it does business.

A 'Competitive Weapon'

Davis urged defense contractors to incorporate VA techniques into their regular operations. Speaking to the Southern California chapter of the Society of Value Engineers in Los Angeles, he suggested that value analysis be used as a "competitive weapon" in the Pentagon's drive to expand competition for defense business.

What Davis is presumably getting at is this: Bidders on defense orders who have a vigorous VA program will impress contracting officers.

Davis said that so far value engineering "has had a rather limited application on an incentive basis." He reported that the most substantial value analysis savings have stemmed from "projects run by government installations or have occurred when value analysis was a normal element of the contractor's technical capability."



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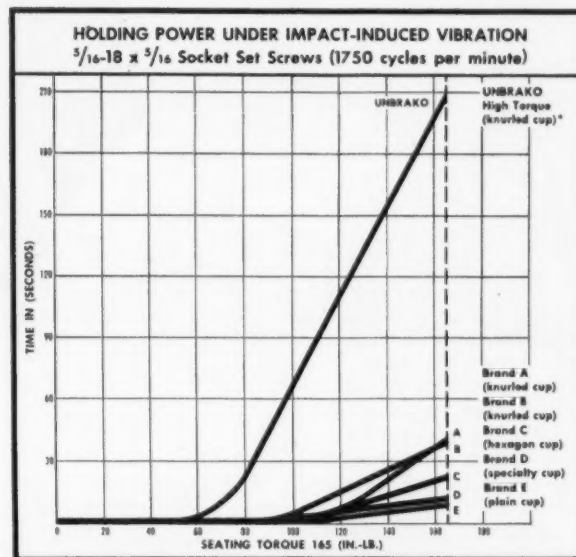
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*No. 2,992,669—patented July 18, 1961. †T.M. Reg. U.S. Pat. Off., The Nylok Corp.

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Sunoco Buys New Firm

Brantford, Ont. — Sunoco Products Co. of Canada, Ltd., has purchased Industrial Steel & Fibre, Ltd., a tubing and container concern.

Industrial Steel operates plants at Toronto and Terrebonne, Que. Sunoco of Canada has plants at Brantford and Granby, Que. The firm is planning a \$250,000 expansion of its facilities here to increase paper production.

Industrial Steel will be absorbed into Sunoco of Canada, a subsidiary of Sunoco Products Co.

Marketing Patterns Seen Changing in Aluminum

(Continued from page 1)
technical assistance domestic mills provide."

Distributors in turn were made happy by Alcoa's and Reynolds' recent setting of 4,000 lb. as their minimum acceptable quantities for orders of standard sheet and plate. Minimum quantities for nonstandard specifications were generally pegged at 2,000 lb. Both minimums previously had been 500 lb.

Olin and Kaiser, while not following with formal minimum quantity announcements, indicated that their policies are roughly equivalent. Kaiser said it doesn't solicit accounts whose requirements run less than 60,000 lb. a year.

Meets Distributors' Complaint

The move by Alcoa and Reynolds goes far toward satisfying distributors' contention that they should have the less-than-5,000 lb. order quantities to themselves. Alcoa and Reynolds were in agreement even before they changed their mill order minimums.

"The quantity per item at the mill is generally higher than the distributor markup for quantities below 5,000 lb.," said Richard A. Sweet, Alcoa's general manager of distribution. "From 5,000 to 10,000 lb. per item, mill prices tend to be lower."

Estimates indicate that Alcoa's and Reynolds' new policy will divert to service centers from 10% to 20% of sheet and plate orders now serviced by the mills—and these items account for some two-thirds of the total aluminum tonnage handled by service centers.

The move also aims at building up what mills see as the distributors' proper share of the market. Currently distributors sell about 20% of Alcoa's aluminum production, 18% to 20% of Reynolds', 15% of Kaiser's and about 10% of Olin Mathieson's.

'Growing Up'

"Mills letting go of small business clears up a lot of marketing confusion and is a definite sign the aluminum industry is growing up," said one big company executive. "Mills lose money and complicate their books by going after small orders."

In line with lessening mill competition with their own volume customers—and another sign to some experts of "growing up"—is the noticeable trend away from the commodity schedules that have become a thorn to the industry in recent years.

Commodity schedules are special low prices published by mills for certain aluminum products aimed at specific end uses that will compete with other materials.

Service centers complain that customers frequently use commodity schedule items for other than the specified purposes and that they compete with other aluminum products rather than with other materials. Distributors and independent extruders both feel this practice cuts into legitimate markets for their own products.

Duct sheet, for example, is a commodity schedule item that is supposed to be used for air transfer systems. Sometimes, however, it is used for louver

vents, gutters, and hidden internal structural purposes for which it is not intended. Thus, customers who might otherwise get aluminum for these latter purposes from the distributor, buy lower-cost duct sheet from the mill instead.

Theoretically, commodity schedules are imposed only to open up mass markets where the promoted product can eventually be produced in low cost volume runs. But some observers feel that mills have used this technique simply as "a vehicle for

cutting prices" or even "to get a particular account."

Lately a marked reaction has set in against commodity schedules. Extruders, distributors, and mills are dissatisfied with the way they've worked out. Last August Alcoa reclassified one of the most important commodity schedule items—building sheet—to alloy sheet 3105 and raised the price 2¢/lb. Other producers quickly followed.

And the industry expects more products to come off commodity schedules.

Many aluminum experts see these mill trends—away from small orders and commodity schedules—as culminating in protracted industry price revisions on a product by product basis.

"It's something that's badly needed," said one producer executive. "There have been many changes—in production machinery, item specifications, and relative product volume—that haven't been analyzed at all for realistic pricing."

"I look for widespread revisions that will strengthen over-all aluminum prices," said a large Eastern extruder. "Poor earnings reports are providing the in-

centive. Removal of costing complications like small orders and commodity schedules will make it possible to do a good job on individual products."

Industry analysts also see more flexibility ahead in mill pricing policies.

"With mills out of competition with service centers on all orders," observed one expert, "They can build up their distributor outlets by lowering prices on such items as 1100, 3000, and 5000 series sheet and plate where foreign competition hurts. At the same time they can compensate by adjusting prices upward for other products that don't have such problems."



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REA Delays Unit-Pak Starting Date; New Trucker Protests Seen Likely

New York—REA has postponed the effective date of its Unit-Pak rate scale from Nov. 13 until Jan. 12 "to clear the air of a lot of confusion." Industry observers say the postponement will give the truckers extra time to mount their opposition.

Before the postponement, the Interstate Commerce Commission's suspension board voted to investigate, but not to suspend, the REA rate scale. The truckers immediately appealed the decision. The appeal is still pending.

Under the Unit-Pak plan, small pack-

ages would be carried in an REA-supplied container capable of carrying 101 cu. ft. of any commodity up to 3,000 lb. The rates would be as much as \$25 less than motor carrier rates for trans-continental shipments.

REA cited three reasons for postponing the start of the service:

- It wants to compare the proposed rates, based on cubic feet, with the present rates, based on weight. REA hopes the study will counter the truckers' charges that Unit-Pak rates are so low that REA would operate at a loss while driving the truckers out of the small-shipment business.
- It wants to complete arrangements with suppliers for delivery of the containers and determine traffic pattern.
- It needs more containers. REA is currently using about 400 containers under the present rate scale.

New Freight Bills Designed To Cut Down on Paperwork

New York—Two new contributions to cutting down the amount of paper work and the number of errors in freight shipments have appeared on the scene:

• **The VIP** (Verifax Interline Procedure) bill of lading, developed by Eastman Kodak Co. and printed by Standard Register Co., which uses a highly-sensitized carbon paper to produce nine copies of the bill of lading.

• **The Clipper-Fax** process, developed by Clipper Carloading Co., Chicago, which photographically reproduces the bill of lading on the freight bill. It also produces nine copies.

Eastman's VIP form, which also can double as a freight bill, is designed primarily for use by the shipper and helps speed delivery by eliminating the necessity for recopying bills of lading. No special equipment other than the form itself is required.

Clipper's form is designed primarily for use by the large-scale carrier and helps speed billing by eliminating re-copying and file searching. Besides the photographic and reproduction equipment required to print the bills, Clipper also uses computers to do the billing.

Can Be Combined

There apparently is nothing to prevent combining of the two forms, i.e., reproducing Eastman's VIP bill of lading on the Clipper-Fax freight bill. The VIP bill comes in two sizes—5½ x 8½ in. at 3¢ each, and 8½ x 11 in. at 5¢ per bill.

Both Eastman and Clipper say that by reducing the amount of paper work, their forms eventually may reduce the cost of freight shipments.

The VIP form was recently hailed by the Purchasing Agents Assn. of Rochester, N.Y., as "the greatest improvement in transportation paper work ever devised." It currently is being used by three Rochester concerns—Eastman Kodak, J. Hungerford Smith Co., and Van Curler Trucking Corp.

The Clipper-Fax process currently is being used only by the carrier itself.

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Management Memos

What's Your Line?

Efficient company operations depend on everyone on the management ladder knowing exactly when and where it is his responsibility to do a job. A lack of knowledge concerning these duties can lead to confusion and a failure to accomplish important tasks.

What's needed, says the National Industrial Conference Board in *Management Record* magazine, is a "position guide" which defines and delineates the role of each member of the management setup. These position guides are more complete than the old job description system because they spell out what a particular position encompasses, the execution of its responsibilities, and the relation of that position to other management functions.

Here, according to NICB, is the format generally used in constructing a position guide. It contains at least three sections: a "title," a statement of "basic function," and an itemized list of "duties and responsibilities," though guides may vary in form.

- A title simply means the position.
- The basic function of the job is the reason for which the position was created.
- Duties and responsibilities are a more detailed expansion of the basic function, and the criteria by which it is evaluated.

Besides diagramming authority and responsibility, the guide also may be used in organization planning, recruiting, manpower planning, wage and salary administration, and management development and work appraisal.

Computer Esperanto

The day when man and machine can communicate intellectually is not far off, according to a space technology expert.

Dr. Simon Ramo, executive vice president and director of Thompson Ramo Wooldridge, Inc., told a recent gathering of scientists at the 1961 Computer Applications Symposium that we are entering the age of "Intellectronics" in which there will be "a new man machine partnership in intellectual activities."

He visualized that this new age would require a world-wide, common, logical language consistent

with computer use so man would be able to talk with machine. And, Dr. Ramo added, "This new language will commence to influence the spoken and written English of our every day man-to-man communications."

He describes the language in terms of color codes, sound patterns, finger snaps or taps, or the replacement of the common decimal system by the binary or octal number system employed in computers.

"Clearly, for the physical operations of the world, it is a far stronger candidate for the worldwide standardization than universal language proposals of the past (such as Esperanto) that were invented before the machine partner had a vote. Such systems would provide more uniform sentence structures for man-machine and machine-machine communications," he said.

Pay the Consequences

"I forgot" is a poor excuse, according to Mohawk airlines. To prove its point, Mohawk purposely delayed paychecks one day for 400 executives and supervisory personnel of the airline. An explanatory note attached to each check read, "Your paycheck is late because I forgot."

Described as a part of an informal system-wide training program, the ploy was used to remind management that delays result in serious inconveniences.

Thanksgiving Mail

Any day of the year may now be turkey day, says the U.S. Government Printing Office. The Superintendent of Documents, Washington 25, D.C., has a 21 page pamphlet available for 15¢ called "Turkey on the Table the Year Round." It tells how to buy and prepare your turkey.

Short Pointer

Before you install your computer, reports *Power*, a McGraw-Hill publication, a call to a representative of your electric utility and the computer's physical-planning engineer might head-off costly repairs.

Voltage irregularities, occasionally occurring in power lines, can have serious effect on computers which have drastically less tolerance for variations in their power supplies than other electrical equipment. Power fluctuations can cause computers to make errors, shut down, or sustain serious damage.

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PURCHASING WEEK is published weekly by McGraw-Hill Publishing Company, Inc. Founder: James H. McGraw (1860-1948).

SUBSCRIPTION PRICE: Available only by paid subscription. Publisher reserves the right to refuse nonqualified subscriptions. Subscriptions to Purchasing Week solicited only from purchasing executives in industry, business, and government. Position and company connection must be indicated on subscription orders forwarded to address shown in box below. U. S. Subscription rate for individuals in the field of the publication \$6 a year; single copies 50 cents. Foreign rates on request.

EXECUTIVE, EDITORIAL, CIRCULATION, AND ADVERTISING OFFICES: McGraw-Hill Building, 330 West 42nd Street, New York 36, N. Y. Telephone: LOngacre 4-3000. Teletype: TWX N. Y. 1-1636. Cable Address: MCGRAWHILL, N. Y.

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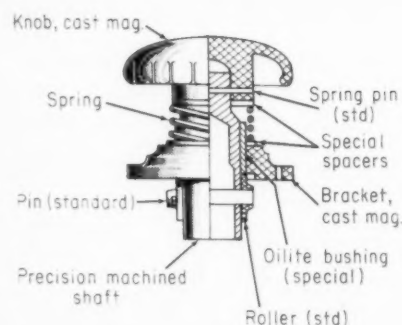
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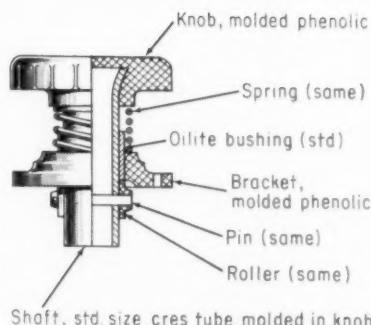
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SUBSCRIPTIONS: Send subscription correspondence and change of address to Fulfillment Manager, Purchasing Week, 330 West 42nd St., New York 36, N. Y. Change of address should be sent promptly, giving old as well as new address and including postal zone number, if any. If possible enclose an address label from a recent issue of the publication. Please allow one month for change to become effective.

WHAT VALUE ANALYSIS CAN DO FOR YOU



BEFORE ANALYSIS: Knob assembly for helicopter rudder pedal adjustment was fabricated with tooling specified for the part when it was a low production item.



AFTER ANALYSIS: Assembly was re-designed for volume production techniques. Knob was switched from cast magnesium to molded phenolic; machined shaft was replaced with standard size.

Source: Bell Helicopter Co., Fort Worth, Tex.

TECHNIQUE:

Re-specify tooling when quantities change substantially.

SAVINGS:

Cost cut 84% (\$38.42 to \$6.41).

Purchasing Week Asks

How do you feel about a minimum charge on all small orders?

Asked at: New England Purchasing Conference
Boston, Mass.



Marion Seufert, purchasing coordinator, Badger Mfg. Co. (water evaporators, expansion joints), **Cambridge, Mass.:**

"It depends on the situation and the P.A.'s relation with the firm. If you have not done much business with a company, you can't expect it to furnish material to you at a loss. It costs money to process an order. Usually a supplier will call, tell you he has a minimum, and ask if he should bring the order up to that charge."



Thomas Daley, vice president in charge of administration, Parker-Hartford Corp., Hartford, Conn.:

"The same procedures and the same amount of labor is involved in handling a small order as a large one. And often the small ones give you most trouble. I think it is only fair that a minimum charge be placed on these because paperwork costs are same whether the amount is \$1 or \$500."



W. E. Jordan, Jr., purchasing agent, Sanders Associates Inc. (advanced systems laboratories), **Burlington, Mass.:**

"I recognize that small orders are costly to both buyer and seller and we avoid them whenever possible. However, in a small R&D operation like ours, we cannot escape placing quite a few of them. We just have to reconcile ourselves to the fact that we are to pay a premium for small orders in one form or another—if not in minimum order charges, then in higher unit prices, etc."



N. C. Keyes, purchasing agent, Outlet Co. (operators of radio-TV station & department store), **Providence, R.I.:**

"I feel a minimum charge is fully justified in most cases, as the vendor has the same amount of paperwork for inventory control, billing, and delivery. We run into small orders frequently, but I have rarely come across a minimum charge. In most cases, price is determined by quantity brackets."



E. P. Fitzgerald, purchasing agent, Photon, Inc. (photographic type-composing machines), **Cambridge, Mass.:**

"By being charged an automatic minimum, it saves you a lot of looking up and expedites work involved. I think it is an excellent idea. You don't have to go around checking suppliers to save a nickel. I feel it is a business necessity when you are looking for estimates on what a small job will cost a customer."



A. T. Henderson, procurement manager, Woods Hole Oceanographic Institution, Woods Hole, Mass.:

"I think such a charge is justified. You usually establish a figure for the cost per purchase order and you try to avoid writing orders that are less than that value. Therefore, I should think minimum value per sale would operate in the other direction."

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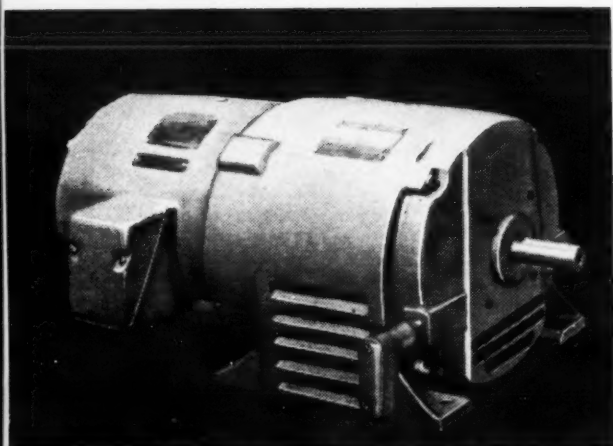
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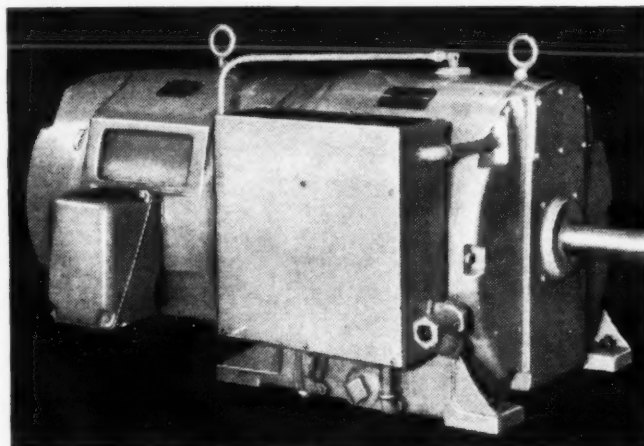
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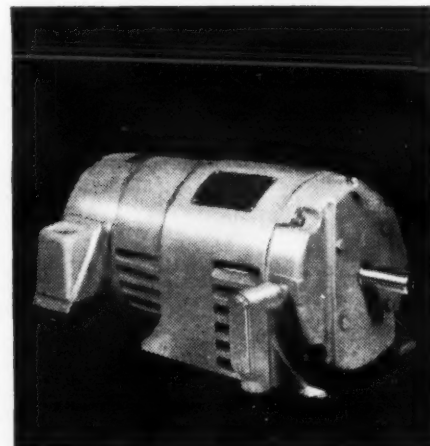
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Based on results, drills "A" and "B" (center and right, above) should cost 43% and 39% less than W & B drills (left, above)—instead, they can be purchased at *only* about 20% less.

Watch those *initial* costs—they may be costly!

COMPARATIVE DRILLING PERFORMANCE

General Purpose Jobbers Drills	*No. of holes per drill size					Total No. of Holes	Efficiency Rating
	#40	#30	3/16"	1/4"	5/16"		
W & B Drills	208	62	57	50	34	411	100%
"A" Drills	142	24	14	28	28	236	57%
"B" Drills	114	49	13	61	15	252	61%
Thickness of plate	3/32"	3/16"	1/8"	1/4"	3/8"	Material: Heat treated chrome nickel steel	

*In each drill size, five drills of each brand were tested and each drill was resharpened three times as required.



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Many drill performance tests similar to this one have been made. However, W & B will gladly conduct drill tests at *your* plant and under *your* conditions. Contact us direct or through your W & B distributor. He can offer this service plus fast delivery from complete stocks.

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Corporate Gift-Giving to Hit Peak This Christmas

New York—Business gift merchandizers believe the coming Christmas season will set a new high in corporate gift-giving despite increased efforts of many firms to discourage the practice. They estimate American businesses will spend some \$313-million on gifts, not counting liquor, this Christmas. The volume was at about the \$300-million level during each of the past five years.

Although the volume of Christmas gifts is growing, so is the number of firms opposed to giving and receiving them. This year, more firms have joined the ranks of those not giving gifts; more are sending letters asking that no gifts be sent to their employees, more are telling their employees not to accept gifts.

Growing Opposition

One firm has recognized this growing corporate opposition to Christmas gifts in its advertising campaign. National Distillers & Chemical Corp. is planning a series of ads on the theme, "Has anyone ever returned a bottle of Old Crow?"

Liquor remains the most popular business gift. But among other items, the list of what's "in" and what's "out" varies from year to year, and the problem of selection is a difficult one.

The difficulty of choosing the proper Christmas gift has led to the rapid growth of a new industry—the "select-your-own" gift firms, which allow the recipient to choose his own gift.

Here are some of the trends merchandising experts have noted in 1961's business gift giving:

- The average gift will be worth \$9.10, about the same as last year.

- Food packages, such as fruit from Florida or cheese from Europe, are becoming less popular. The reason: Individual tastes are too likely to differ.

- Pen and pencil sets have become less popular. The exception: ball-point pens inscribed with an advertising message. However, these tend to be regarded—like calendars—less as a gift than as a useful item which keeps the company name before the recipient's eyes.

- An increasing number of firms are giving something they themselves manufacture. For example, Colgate Palmolive Co. is distributing a gift packet of its products; Schering Corp. is giving a package of "Coricidin" cold tablets.

Selecting Gifts Difficult

"The business of selecting a gift is a thankless chore for most business men," says Harry King, president of New York's Automated Gift Plan, Inc. "The giver has no way of knowing whether or not the person receiving the gift has the item already."

The select-your-own gift plans are designed to solve this problem. Last year, they sold some \$4-million worth of business gifts, distributing about 400,000 different items. In 1961, the nearly 500 firms in the field expect to double both these figures.

Under the select-your-own plans, the buyer purchases a certificate for a set value—\$10, \$25, or even \$100. This certificate

and a catalog of 10 to 20 items of that value are sent to the recipient. He chooses his gift and the item is mailed to him.

Gift certificates are nothing new. Department stores have been using them for years, but their market was in individual, personal selections. The select-your-own gift plans differ from the department store certificates in two ways: They are nationwide and the offer only a limited range of items.

The items chosen under the select-your-own plans often tend to be things no firm would consider giving as a Christmas gift. Joseph M. Segal, president of the Selective Gift Institute, Philadelphia, compiled this list of the most popular items ordered from his firm:

At \$6, a do-it-yourself tool kit; at \$7, a desk clock; at \$10, two white shirts; at \$15, a wall clock; at \$25, a sun lamp; and at \$50, a floor polisher.

Smith-Corona Forms New Microstatic Div.

New York—Smith-Corona Marchant, Inc., has formed a microstatic division at its plant in Skokie, Ill. The division will manufacture the firm's new "33" electrostatic photocopier.

The "33," according to SCM officials, will produce "dry, print-perfect copies faster, at a lower cost than machines currently on the market." The machine uses a sensitized paper which is electrically charged, exposed and developed.

The "33" will sell for \$895. Copies can be produced at 3½¢

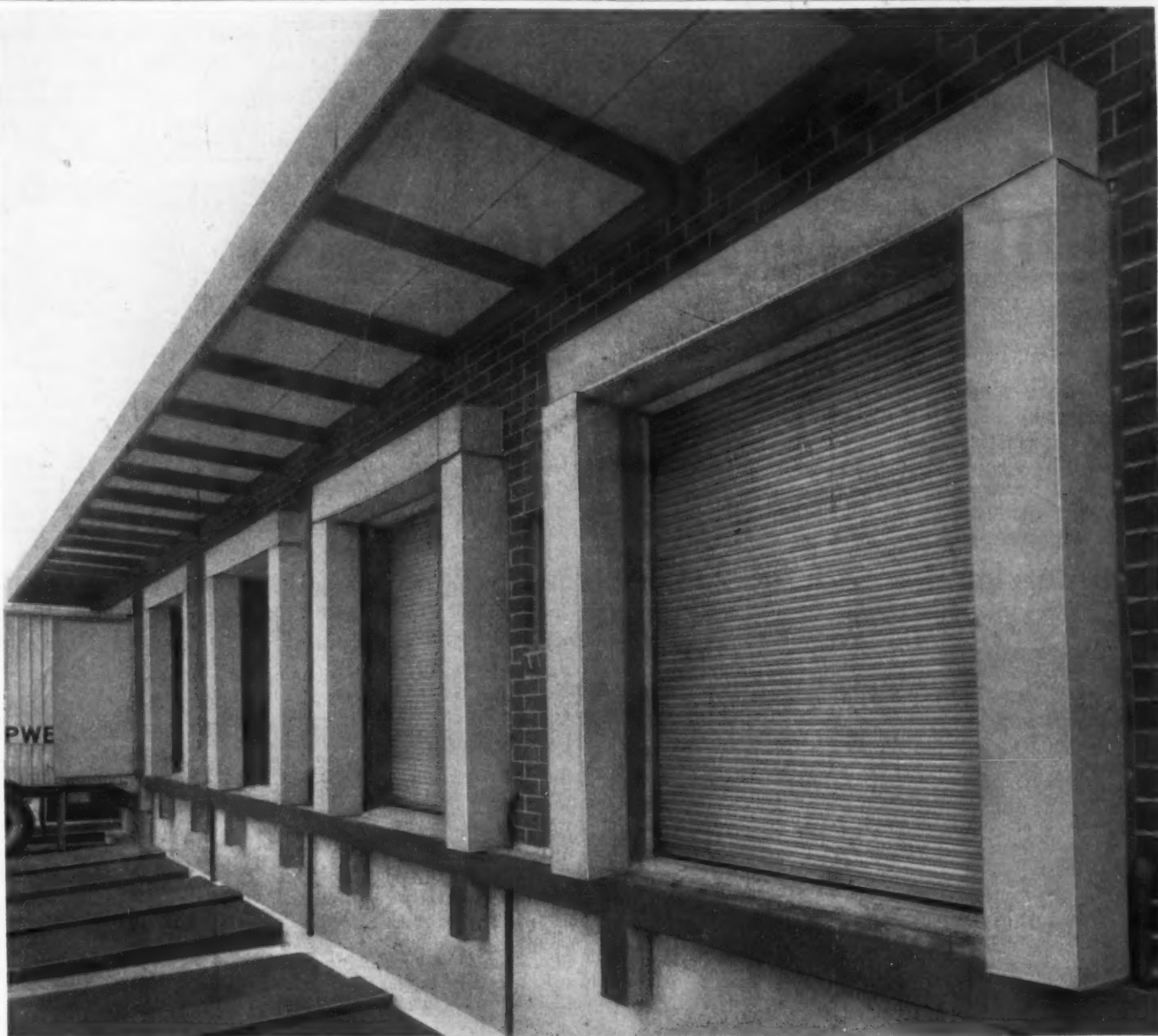
each. It is expected to go on the market early next year.

Detroit Steel Switching To Oxygen Technique

Detroit—Detroit Steel Corp. is converting all its open hearth plants to the oxygen steel-making technique, a process designed to boost production by 40%.

Linde Co., a division of Union Carbide Corp., has completed conversion of Detroit Steel's 140-ton/day mill at Portsmouth, Ohio.

The switch from open hearth to oxygen technique is the first step in Detroit Steel's \$75-million, five-year expansion.



A TIGHT FIT—This plant, in the baby wear division, is P. H. Hanes Knitting Company's plant at Galax, Virginia and is the largest of four recently built plants. Most of their production, the manufacture of infants' and babies' underwear and apparel, is shipped by trailer truck throughout the country. Truck seal bumpers, as seen above, have been installed to provide almost air-tight seals between trucks and the loading platform. They are made from a solid compressive material that has been covered with canvas and bolted around the loading platform openings. The trucks back onto leveling platforms which raise or lower the level of the truck floor with that of the loading platform. Trucks are backed tightly into these compressive bumpers which then compress to seal off the truck with the loading platform. Bumpers are 12 x 12 and covered with #8 duck. Covers were made for Hanes by the Dize Tent & Awning Co. from Mount Vernon duck.

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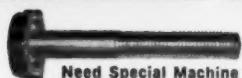
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Industry News in Brief

Enjoy to Buy Extrudo

New York—Enjoy Chemical Co., a division of Humble Oil & Refining Co., has entered into an agreement to purchase Extrudo-Film Corp. The acquisition is subject to approval by Extrudo stockholders. Extrudo, which makes polyethylene and polypropylene film, has plants in Pottsville, Pa., and Wentzville, Mo.

Metalphoto Corp.

Cleveland—Metalphoto Corp., has appointed Precision Marking Co., Minneapolis, as exclusive representative of its line of "Premarco" photo-chemical processed plates and its recently added anodized name plates.

Bolton-Emerson Expands

Lawrence, Mass.—John W. Bolton & Sons, Inc., and its Emerson Mfg. Co. division have purchased Sheppard Plate & Machine Works, Atlanta, Ga., manufacturers and distributors of disc refiner plates for the pulp and paper industries and attrition mill plates for the feed industry. The new firm will be known as Bolton-Emerson Southern, Inc.

Gering Plastics

Kenilworth, N. J. — Studebaker-Packard Corp.'s Gering Plastics Div. is now a national sales agent for "Cellulite" expanded polystyrene. Cellulite board is used for consumer and industrial packaging of breakable or sensitive items such as crystal and electronic instruments.

Corning Glass

Corning, N. Y.—Corning Glass Works' Corning Electronic Components Dept. has appointed Radio Electric Service Co. of Baltimore, Inc., as its distributor in the Baltimore area.

Pacific Industries Expands

San Francisco—Pacific Industries, Inc., said it will spend \$500,000 to expand the facilities of its Midland Div. in Kansas City, Mo. The division makes quartz crystals, crystal filters and related components for the communication and electronics industries.

Buys Texas Plant

Culver City, Calif.—Electrada Corp. acquired Gear Industries, Inc., Ft. Worth, Tex., a manufacturer of helicopter gears and assemblies. The acquisition gives Electrada its first penetration into the Texas technological area.

Expands California Plant

Santa Clara, Calif.—Federal Pacific Electric Co. expanded its facilities here starting full operation of its new 226,000 sq. ft. plant devoted to the manufacture and development of high voltage distribution and control equipment.

Zollner Adds to Foundry

Fort Wayne, Ind.—Zollner Corp. plans to build a 30,000-sq.-ft. addition to its aluminum foundry here. Zollner said the

expansion will involve an investment of approximately \$75,000 for building and equipment. The firm makes cast aluminum pistons for heavy-duty trucks, passenger cars and industrial equipment, as well as other permanent mold products.

New Sandvik Branch

Fair Lawn, N. J.—Sandvik Steel, Inc., has established a new branch office in Seattle, Wash., for the sale of its stainless seamless tubing, specialty spring steels and springs.

New Oil Fractioning Plant

Wilmington, Del.—Hercules Powder Co. will start immediate construction of a multi-million-dollar tall oil fractioning plant in Portland, Ore. The new fa-

cility will be large enough to handle the crude tall oil available from kraft pulp manufacturers in the Pacific Northwest. Hercules supplies chemicals for the paper industry and also produces rosins and fatty acids at other tall oil plants. The plant is expected to be in operation within a year.

Kawneer Buys 2 Sites

Niles, Mich.—Kawneer Co., a manufacturer of architectural metal products, has purchased two plant sites—one in Atlanta, Ga., and the other in Toronto, Ont. Construction of the new facilities is scheduled for this year. The Atlanta plant will make building products for the southeastern states, while the Toronto unit will replace existing facilities there.

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WAREHOUSE CAPACITY DOUBLED: A stockman pulls molybdenum sheets off the shelf at Fansteel Metallurgical Corp.'s warehouse for refractory metals. The North Chicago firm recently doubled the capacity of the warehouse, enabling it to speed up shipments and make longer production runs. Orders to stocked specifications can be shipped on the same day; others are sent within five. The warehouse stocks tungsten, tantalum and columbium as well as molybdenum in sheets, ingots, rods, wires, and various other forms.

Paper Plant Planned

Milwaukee—American Lacer Paper Co., manufacturer and distributor of household and commercial paper products, is constructing a new West Coast facility in Anaheim, Calif. The company also plans a future name change to one more descriptive of the firm's range of products.

USP Completes Expansion

Richmond, Calif.—U. S. Peroxygen Corp., manufacturer of organic peroxides, has completed an expansion program which doubles the firm's capacity to

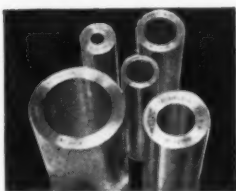
produce tertiary butyl peroxide. The product is used as a catalyst in the production of silicone rubber, polystyrene and polyolefins.

Copper Firm to Build

Cleveland—National Copper & Smelting Co. will construct a \$1-million plant which will triple the company's capacity for making copper and brass tubing. Production at the new plant will include straight and coiled tube for water tubing and for use in the refrigeration and air conditioning fields, and cut lengths for a variety of manufacturing equipment industries.

STOCK BARS OF AMPCO metal SAVE MACHINING

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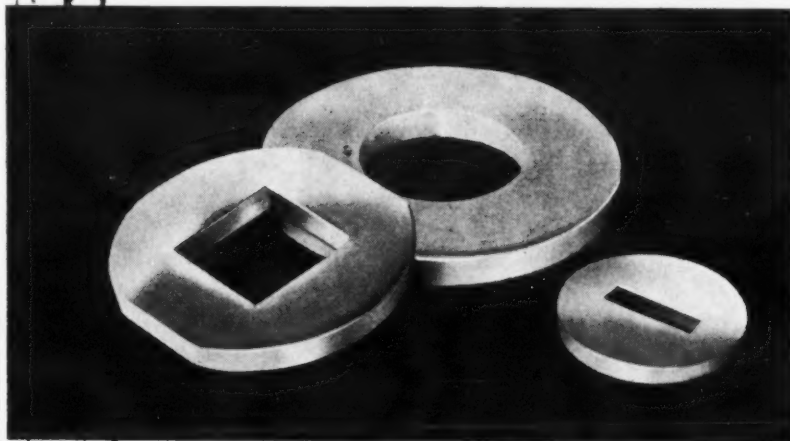
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If You Can Solve This Management Problem You Can Win...

Professional Development Case No. 3

Pete Russell is the purchasing director of a fast growing company that makes materials and some semi-fabricated products for a wide range of industries. Its sales of \$6-million were made to many different companies, and Russell bought materials and supplies from vendors who were customers or potential customers.

Recently he put out bids for some new equipment for his own shop. While considering the bids, Pete's sales manager came into the office. "Pete," he said, "one of our best customers is bidding on this job and I hope you are giving him a break. I think he ought to have the business even if he is a bit high. Do you mind telling me where he stands. Their people have called me and I'd like to give them some good news."

Pete said, "You have brought up a subject that in my opinion this company has never thought through. Sure we ought to do business with our friends but on what basis? Remember I have responsibilities here in Purchasing to buy the best value for the company.

"It has occurred to me that our firm is growing so rapidly that the problem of trade relations will have to be faced before it becomes a real bugaboo. Should I ask top management for a list of favored vendors? Furthermore, if I get such a list, should I deal with the favored vendors myself, or should these transactions be left to top executives? Finally, should the favored vendors get all the business in their lines, or should the company hedge against price increases and strikes by splitting the purchases with non-favored vendors? Who would determine that?"

If you were in Pete's shoes, how would you pursue the situation to a clear outcome?

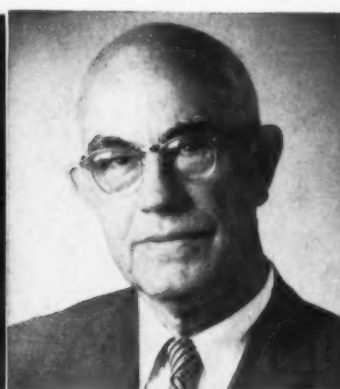
This is the third in a series of case-problems to appear—at two-week intervals—in PURCHASING WEEK's Professional Development Competition. Entries for each case will be judged separately. These cases were specially designed for this Competition by P/W Consultant F. Albert Hayes.

This Certificate

Awarded By These Judges



F. Albert Hayes, former NAPA president, v.p.-purchasing at Bigelow-Sanford Carpet Co., Shipman Medalist and Purchasing Week Consultant.



George A. Renard, retired national secretary of NAPA, Shipman Medalist, and author of the Purchasing Week column, "From One P.A. to Another."



William R. Leitch, P/W Management and Professional Development Editor, and winner of Jesse H. Neal Business Journalism Award of Merit.



Here Is What You Should Know About This Competition

Object: To stimulate your thinking on today's broad management problems in the purchasing profession—and properly recognize your alertness.

Eligibility: Any Purchasing man may enter the Competition as an **individual**; or any Purchasing Department may enter as a **team**; or any group of Purchasing people may get together and enter as a **pool**.

Awards: There will be as many awards in this Competition as case problems. In other words, you may submit one entry any time—or every time. The awards themselves are certificates (such as shown above) signed by Donald C. McGraw, President of the McGraw-Hill Publishing Co., Inc., and the three judges. Wherever possible, the **winners will receive the awards via the president of their own companies** who—in every instance—will be notified of their achievements.

Where to Enter: Address your entry to William R. Leitch, PURCHASING WEEK, 330 W. 42nd St., New York 36, N. Y.

Time Limit: Entries must be postmarked no later than two weeks after publication date of each problem. (For this one, the limit is Dec. 4.)

What to Enter: You should submit an outline of how you would handle the case-problem. The judges suggest that **two typewritten pages (double-spaced)** would be a good target length. In other words, you should write the judges a memo broadly stating what plan of action you would pursue if confronted with the situation described in the case-problem. Your plan should be original (avoid quoting from books or speeches) and should not include such burdensome detail as specific figures, calculations, etc. Do not send documents from your firm (such as your policy manual) as part of your answer. Attack the problem from the viewpoint of the hypothetical P.A. in the case.

How you will be judged: Obviously, these case problems have no single, pat solution, such as problems in mathematics do. So **the shrewdness of your strategy is what counts**. (In the reciprocity problem on the opposite page, consider how the P.A. involved can make the best managerial decision on trade relations for the over-all benefit of the company. This is the sort of thinking the judges will watch for in your answer.)

Finally, **there are no tricks or hidden clues in the case problems**. Accept them at face value, write your memo accordingly, and good luck.

Metal Perforators Form Trade Group To Establish Standards for Industry

Chicago — Representatives of eight metal perforating companies met here to organize a new industry association, which will attempt to establish standards for perforated metals of all types and for all markets.

The new group, known as the Industrial Perforators Assn., began its task by compiling standards for perforated screen plate used in vibrating and revolving screen equipment.

The new standards are contained in a brochure which can be obtained on request from any of the eight companies. They are: Cross Perforated Metal Div.,

National-Standard Co.; Diamond Mfg. Co.; Hendrick Mfg. Co.; Johnson & Chapman Co.; Laubenstein Mfg. Co.; McKey Perforating Co., Inc.; National Perforating Corp., and Toepfer & Sons, Inc.

Temporary chairman of the association is Douglas E. McKey, president, McKey Perforating Co., Milwaukee. He said the group's next meeting will be held Dec. 13 at the Penn-Sheraton Hotel, Pittsburgh.

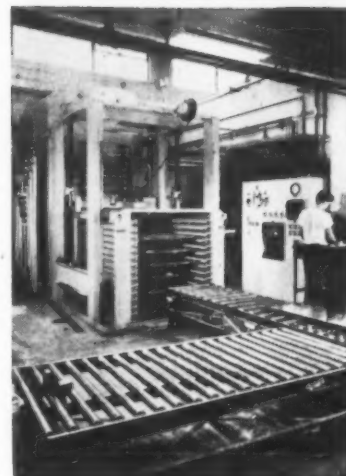
Government, Industry Hold Joint Surplus Sale

Columbus, Ohio—Millions of dollars worth of surplus equipment will be sold at auction here Nov. 25-29 during the Industrial and Government Surplus Trade Exposition.

Exposition officials expect a trading volume of \$6-million at the show, which will be limited to hard goods. The Army also will hold a "spot bid sale" at the exposition on Nov. 29.

Items ranging from jeeps and engine lathes to nuts and bolts to old landing boats, will be offered for sale.

NEW PRESSES INSTALLED: Continental-Diamond Fibre Corp. has installed entirely automated plastics laminating presses at its Newark, Del., plant, part of the firm's \$6.5-million expansion and modernization programs.



Packaging Engineers Set \$1,000 Prize in Contest; P.A.'s Eligible to Enter

San Francisco—The packaging profession's richest prize, \$1,000, will be awarded to the winner of the professional papers contest held by the Society of Packaging and Handling Engineers.

Both members and nonmembers of the packaging industry may enter. Papers may be submitted on the general subject, "Effective Management of Packaging and Handling," or on a variety of technical subjects.

Notice to file must be submitted by Jan. 31; the contest closes on March 15. Entry rules and further information may be obtained from the contest chairman: Fletcher Day, Cannon Electric Co., P. O. Box 2316, Terminal Annex, Los Angeles 54, Calif.

Oak Report Spells Out Firm's Potential to P.A.'s

Crystal Lake, Ill.—Oak Mfg. Co. has compiled a special report designed to help purchasing agents evaluate the company as a potential supplier. The firm makes a broad line of custom-made switches, solenoids, choppers, modules, television tuners, appliance and vending controls, and other related products.

The illustrated report, said to be one of the most comprehensive in the electronics field, gives complete details on the company's management, financial condition, licensing, research and development, engineering, plant location, and facilities.

It is available on company-letterhead request, from the Oak Mfg. Co., Public Relations Dept., Crystal Lake, Ill.

Builds New Cement Dock

Bayonne, N.J.—The newly-formed Atlantic Cement Co., Inc., is building a \$1-million cement dock here. The dock will service shipments from Atlantic's cement mill at Ravena, N.Y., 12 miles south of Albany.

The dock, to be started Dec. 1 and completed by Jan. 1, 1963, will have facilities for docking 27-foot draft barges and for transferring the bulk cement to smaller barges for delivery in the metropolitan New York area.

The dock is one of six Atlantic is planning to build on the Eastern Seaboard.



Unemployment Dampens Recovery Outlook

New York—Concern is growing over the continuing high rate of unemployment. Some 7% of the labor force remains jobless—despite a 10% increase in production since the beginning of the year.

Major fear among economists is that this high rate can seriously affect business recovery in 1962 by dampening buyer enthusiasm for automobiles and other big ticket items. For history has shown that consumers

always tend to pull in their horns whenever unemployment stays much above the 5% level.

The current unemployment trend is a lot different from those noted during other recent recovery periods (see chart). In 1954, for example, the jobless rate dropped 1.7 percentage points over the first 9 months of recovery. And in 1958 the drop was almost as big, in the order of 1.3 percentage points. Contrast that to the current

pattern where the 6.8% unemployment figure is exactly the same as that prevailing at the time of the recession low point in February.

Labor experts trace the difference this time around to a combination of two factors:

• **Accelerated automation**—Much of the labor-saving capital equipment ordered in the late 1950's is just now coming into operation. This can clearly be seen by the tremendous jump of output per manhour over recent years.

In 1951, it took 1.6-million production workers to turn out one index point of industrial production. Today only 1.08-million workers are needed. That's a 33% decline in labor requirements.

Putting all this another way, productivity in manufacturing has gone up 33% over the decade, at an annual rate of close to 3%.

In some industries, where automation has really taken hold, the labor situation is even more acute. Thus, in the instrument and chemical industries, output per man hour is roughly two times the level prevailing a decade ago.

• **Labor force increases**—In the late 50's the work force was increasing at a relatively slow rate—reflecting the depressed birth rate of the late 1930's. But now, with the World War II baby crop starting to mature, the labor force is rising at a much faster clip.

A few figures highlight the change. A few years ago, only about 500,000 new workers were entering the labor market each year. Latest statistics show a 1.2-million annual jump—more than double the number of five years ago.

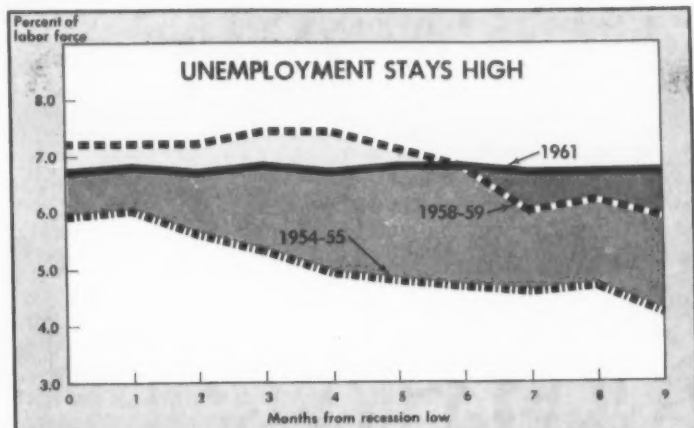
The only way to offset the combined effects of automation and a rapidly rising work force, say the experts, is through stepped up industrial growth. One labor economist notes that the Gross National Product "will have to increase close to 5% a year if unemployment is to be brought down to 4%-5% levels."

What's worrying Administration economists right now is that if the current jobless rate holds, unemployment will soar over the 5-million mark by early next year. Seymour Wolfbein, manpower chief of the Labor Dept., calculates that a 6.8% unemployment rate in Jan. 1962 will imply a 5.5-million unemployment figure.

But not everything is black in the labor picture. Latest employment reports, for example, show several optimistic signs.

Thus, Commerce Secy. Luther H. Hodges last week noted that the current business upswing, while it has not benefited the unemployed, has aided "the workers who were on short work weeks a year ago." Many of these, he notes, have returned to a standard work week.

Long-term unemployment, involving people who are out of work 15 weeks or more, has also shown signs of easing. As of mid-October, there were 1.2-million of these workers seeking jobs, compared to the 1.6-million of last February.



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Professional Development Perspective



**CONSULTANT
DR. CLYDE T. HARDWICK**

Prof. of Economics, University of Detroit

Discusses

How Buyers Spend Their Time

If purchasing directors could know the actual behavior of buyers—how they spend their time—then recruiting, professional development and training programs, and ultimate placement could be much more effective.

For example, if buyers are engaged in telephoning and talking

for more than half of their working time, supervisors have the responsibility of selecting and developing buying personnel in the art of communication. At the same time, development programs in interviewing and persuading should be central to purchasing training.

Also, with this kind of knowledge, some rearrangement of buyers' assignments might be in order, such as providing more clerical help to free buyers for more technical tasks. Purchasing men often report that they have little control over their day's time. That is, a buyer becomes an involuntary slave of the telephone, visiting salesmen, and office red tape.

However, purchasing supervisors and executives have the power to see that buyers are in fact freed to spend time on professional tasks. In one instance, a buyer reported that he was spending less than one day a week in negotiating. If the buyer's professional duty is to buy right, from the right sources, at the best price by negotiating, why should he spend four days a week at less worthy tasks?

There are several methods of gaging the use of a buyer's time. A supervisor could use job specification sheets or a topical questionnaire, or interview buyers, or even take a continuous audit of his department's activities. In a study conducted by the University of Detroit, we decided to avoid the general approaches and utilize a more accurate method called work sampling, which is based on random observations of actual work situations.

How It Works

Like a quality control program, work sampling follows the statistical theory that inspection of a significant cross section will provide a reasonably true pattern of the total. In work sampling, instead of watching and talking to employees continuously during the entire working period, the observer visits and records the worker's activities periodically throughout the day.

The field study conducted by the University of Detroit consisted of 42 instantaneous and random observations a day of five regular buyers from five commodity buying groups.

In practice, visits were made at random times at intervals of 5 to 20 minutes. Since the buyers did not know when to expect the observer, they followed a regular work pattern. What this one study turned up is shown in the tables.

In Table 1, telephoning and talking consume almost 60% of the average buyer's time. Table 2, relates this time to activities. As expected, there is a wide range of tasks; however, almost 60% of the buyer's time centered on four jobs—preliminary discussions with requisitioners, negotiation with vendors, handling purchase orders, and administration.

**Table 1
Five Buyers' Time
Summarized by Elements**

Elements	No. Of Observations	Per Cent Of Total
Telephoning . . .	693	33.0
Talking	556	26.5
Writing	292	13.9
Away from desk . .	214	10.2
Reading	139	6.6
Meetings	124	5.9
Clerical	80	3.8
Thinking	2	0.1
Total	2100	100.0

**Table 2
Five Buyers' Activities
Summarized by Functions**

Functions	No. Of Observations	Per Cent Of Total
Administration . .	340	16.2
Preliminary	312	14.9
Personal	299	14.2
Negotiating	293	14.0
Purchase Order . .	264	12.6
Follow-up	158	7.5
Adjustment with Vendor	94	4.5
Requisitioning . .	86	4.1
Research	79	3.8
Invoice Activity . .	77	3.7
Change Order . . .	46	2.2
Standards	27	1.3
Traffic	12	0.6
Inspection	7	0.3
Other	6	0.3
Total	2100	100.0

This report is just one example of how buyers spend their time. Obviously, various industries, different purchasing directors, and some buyers may follow behavior patterns far removed from these findings. But this study does show what a work sampling program can do for the purchasing supervisor. The main idea is that purchasing needs a comprehensive base to guide the training of buyers in efficient management of time.



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Sound Ethical Conduct Begins at Home, Denver Purchasing Agents Assn. Told

Denver — Purchasing agents themselves set the ethical standards in dealing with suppliers, a three-man panel agreed at the second annual workshop of the Denver Purchasing Agents Assn.

"Purchasing involves money, and money does the darnedest things to people," T. G. Paterson, Jr., manager purchasing and traffic, Gates Rubber Co., told the more than 50 P.A.'s who turned out for this Pro-D session.

Honesty and fair dealing have to begin in your own department, Paterson stressed. There should be no difference in the purchasing agent's conduct in a buyer's or seller's market, he said; consistency in our contacts with outsiders is an ethical matter.

"Buyer-seller cooperation, so essential to the conduct of a successful business, can not develop to its proper level unless there is mutual respect," Paterson emphasized. "It is imperative not to disclose a confidence—to play one salesman against another."

Others who participated in the panel discussion on "Ethics, Honesty and Integrity—In Theory, In Practice," included John B. Kline and Edward J. Morrison, both professors of management at the University of Colorado.

Kline pinpointed the purchasing agents' code as moving P.A.'s "in the direction of professionalism." And ethics, he added, "are a big part of this."

The P.A. who is ethical goes to every deal with a free choice—with opportunity for free decision not restricted by some unethical action in the past, Kline said. Everyone needs a framework that will give some concept of what is going to happen, and ethics provide that, he explained.



DIST. 7 PRO-D CHAIRMAN: J. D. Wright, Universal Match Corp., briefed Denver P.A.'s on improving their communications.

Ethics are a sound and proper standard of conduct, Kline explained. "They are a measure of conduct established in a moral sense as well as by laws."

Morrison defined ethics as a practical everyday, continuing matter in the face of daily pressures that would destroy them. "It's not a question of doing right or wrong—this is no black and white question. It's a matter of selecting the right thing to do at the right time." It is the art of getting along in business, and that requires honesty and integrity, he said.

The workshop was arranged under the direction of Tom Childress, purchasing agent, Rockmont Envelope Co., professional development chairman for the Denver Association.

Honolulu Purchasing Probe Sparks Procedural Changes

Honolulu — The city-county government reports substantial progress in overhauling its purchasing procedures following an investigation that resulted in allegations of irregularities.

Mayor Neal S. Blaisdell listed these changes:

- Where departments and divisions once made purchases on a semi-autonomous basis, every purchase order now goes to the office of the new purchasing administrator.

- A five-member standardization committee has taken on the standardization of paper and envelopes as its first project. The committee immediately ended the use of top-grade paper for inter-office memos.

- Requisitions are being consolidated to get quantity discounts.

- All emergency purchases are being

logged, and are not approved unless assigned a number.

- Petty cash funds are being set up in each division. The department head must sign for each withdrawal.

- Personnel in the city's storerooms are being brought under control of the city's new Dept. of Finance, which also has the purchasing responsibility.

VA Proclaimed Best Weapon For Reducing Material Costs

Wilmington, Del.—Value analysis was singled out as industry's best weapon against the increasing cost of materials at a meeting of the Wilmington Purchasing Agents Assn.

Speakers Frank J. Sullivan, a value analysis specialist for the Switchgear Div., General Electric Co., Philadelphia, told P.A.'s how GE undertook value analysis in 1948 to combat long-term cost increases in materials. It enables a company, he said, to obtain the best product available for required functions.

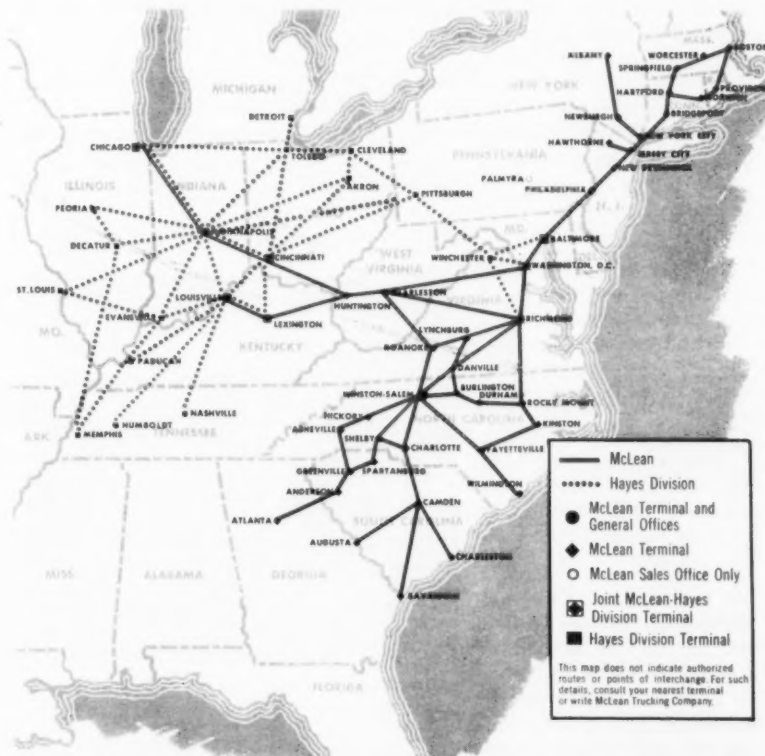
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Certification, Elevating Professional Status Discussed by Wisconsin Public Purchasers

Milwaukee—Certification drew the attention of P.A.'s at the fall meeting of the Wisconsin Assn. of Public Purchasers.

Members agreed that the California State, County, and Municipal Assn. certification plan and a similar project now underway by National Institute of Governmental Purchasing marked the emancipation of the public purchasing job and its elevation to a professional status.

P.A.'s were urged to make use of a purchasing manual. Andrew L. Lehrbaumer, Milwaukee City purchasing agent, pointed out that a manual serves as a guide for department employees as well as informing using departments and suppliers of policies and procedures.

He advised that it also contain job descriptions of purchasing personnel and an organization chart. This, Lehrbaumer explained, would end confusion as to authority to purchase and would also result in better internal and external relations.

Along the lines of external relations, Lehrbaumer emphasized the need for sealed bids and public openings. Specifications, he said, should be reviewed publicly by the standards committee in the presence and with the assistance of prospective bidders to avoid the well-known chant, "The specifications are rigged to favor so and so."

Advice on surplus property offered by the federal agencies was given by Gil Guetzkow, priorities, allocations and surplus property agent for the City of Milwaukee. He said that millions of dollars worth of discontinued items were available—some brand new—for the cost of federal handling, plus transportation, to be used for Civil Defense.

Program agenda also included talks on

buying food, janitorial supplies, and lumber and wood products. Scrap and salvage disposal was also covered and a discussion on "Your Perplexing Problems" ended up the meeting.

Atlas Launches Test Program On Reinforced Polyester Fiber

New York—Atlas Chemical Industries, Inc., has launched a user-participation test program of its polyester fibers. The company wants to determine the effect of corrosive substances on reinforced plastics under industrial conditions.

The tests will be made on 4x5-in. coupons to be furnished by Atlas. The coupons will be immersed in corrosive liquids or exposed to fumes. The user will make periodic visual inspections; Atlas will perform the final physical testing.

Interested firms may obtain test coupons from Chemicals Dept., Atlas Chemical Industries, Inc., Wilmington 99, Del.

New Petrochemical Complex

Chicago—Allied Chemical Corp. and Union Texas Natural Gas Corp. will build a jointly-owned petrochemical production complex at Geismar, La., near Baton Rouge.

Cost of the project, the second-largest in Louisiana; will range between \$40-million and \$60-million. The plant will produce petrochemicals used in plastics manufacture.

Announcement of the project came at the American Petroleum Institute meeting here.

Product Perspective

METALWORKING EQUIPMENT makers have turned to technology to come up with better ways of doing old jobs and new ways to solve seemingly "impossible" problems. Airless spray-guns are now saving industry thousands of dollars in paint costs; ultrasonics are cleaning tiny, hard-to-reach parts; and electron beam welding is being used to join difficult-to-connect metals.

The lag between introduction of new concepts and all-out competition keeps growing shorter. The first airless spray units came on the market just a few years ago, yet now the buyer can choose from dozens of models manufactured by every painting equipment supplier. An even half-a-dozen companies now offer "exotic" electron beam welding equipment.

• **AIRLESS PAINTING** will continue to displace conventional finishing techniques, according to the experts. Airless units, which eliminate most overspray, already are winning a number of fine finish tasks in addition to their original use in rough paint work. Nordson Corp. will bring out one of the most compact units designed to date—it weighs less than 30 lb.—in February. Priced at about \$600 for filter, agitator, hose, nozzle, and pump, the unit can handle anything from a quart can to a 5-gal. bucket.

• **Electrostatic painting techniques** also are beginning to take hold. A negative charge is put on the part being painted, while a positive charge is put on the paint itself, to make it literally jump toward the part. Overspray is practically eliminated, and a single pass from the front will reach behind the part and into every crevice. The system can be used only with metal parts. H. G. Fischer & Co.'s \$2,395 hand gun unit is one of the first portables to hit the market.

• Another "painting" system designed expressly for metals is meeting with good success according to Pennsalt Chemical Corp., originators of the year-old "Hinac" process. The company claims Hinac can shave coating costs two-thirds when colors are used—up to 90% with clear finishes. The chromium-base coatings can be applied in an aqueous solution by immersion, roller or spraying. Coating weights from 1 to 400 mg/sq. ft. are possible. A typical process involves: cleaning, rinsing, coating, and curing (350 to 450 F for 4 to 15 min.).

• **FRICION WELDING** joins the growing list of ways to fasten two pieces of metal together. Just introduced by American Machine & Foundry, the welder resembles a big engine lathe. It welds the butt ends of bars or tubes to each other or to flat plates by rotating one member at high speed against the mating part—then applying high pressure. Friction of metal-against-metal builds up heat—causes the weld to take place.

A friction weld can be made in less than one minute, and dissimilar metals (such as copper to brass or brass to aluminum) can be handled. Two models are now available from AMF: The 15-4 takes tubing up to 2 in. dia. and bar stock to 2 in., costs \$25,000; the model 75-A takes 5½ in. dia. tubing or 3½ in. bar stock, sells for \$65,000.

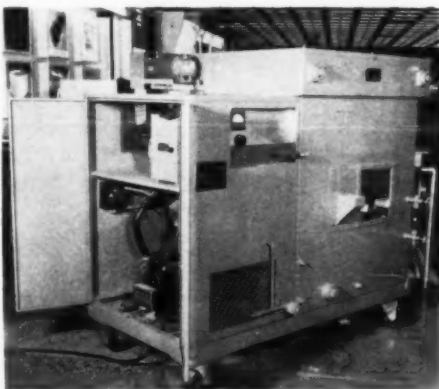
• **Electron beam welders** are becoming increasingly popular in industry—especially in aerospace and electronics—for joining difficult or "impossible" materials such as molybdenum, tungsten, titanium, exotic steels, aluminums, dissimilar metals, and ceramics.

Electron beam unit introduced by Hamilton Standard has a big vacuum chamber, a worktable with variable speed from 3 to 120 in./min., simplified beam control, and more beam power than the company's original model.

• **ULTRASONIC CLEANERS** continue to appear in a never-ending parade of sizes. Newer units are self-tuning and transistorized. Brason Instruments' has come out with a new series designed for Freon solvents with prices running from \$1,085 to \$3,800. New Westinghouse models are self-tuning and have transducers located along entire bottom of tank. Prices run from \$540 for a 1½ gal. tank.

• **First automatic, continuous-flow ultrasonic cleaning system** has been put on the market by AutoSonics, Inc., of Philadelphia. Dirty or greasy parts are poured into one end of the ingenious set-up; clean dry parts come out the other. A transport wheel carries the parts through the ultrasonic fluid bath, then lets them dry. Two or more wheels may be combined to get detergent and wash baths in addition to the ultrasonic dip. An optional solvent recovery system uses refrigeration to eliminate virtually all solvent loss. A single monowheel assembly sells for \$750, while a complete system with four wheels, solvent recovery, and ultrasonic unit is tagged at \$5,400.

• **PUNCHED CARD HEAT TREATING CONTROL** is made possible by Lindberg Engineering Co. "Robotrol." Operator places card in the console, automatically setting such variables as furnace temperature, dew point, time at temperature and quench time. Installations will be made on a custom basis.



Automatic ultrasonic cleaner produces dry, dirt-free parts on continuous basis.

Here's your weekly guide to...



Emergency Light

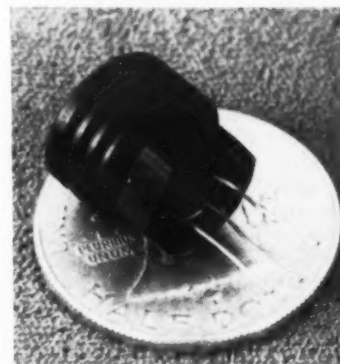
Charges Automatically

Emergency stand-by light automatically provides illumination when regular power fails. Six models available permit remote mounting of lamp heads at up to 120 ft. from unit. Model JA has fully automatic charger to maintain the battery at full power when not in use.

Price: \$135 (model JA). Delivery: immediate.

Carpenter Mfg. Co., 15 Bradley St., Somerville 45, Mass. (PW, 11/20/61)

SIC #3642



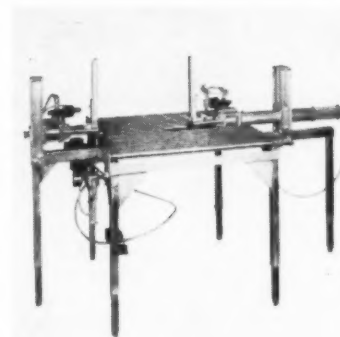
Heat Dissipator

Protects Transistors

Transistor heat dissipator for printed circuit board applications fits all transistors in the TO-5, -9 case styles. The gland nut of the aluminum unit tightens to clamp both sides of the transistor weld flange and conduct heat to the fin area for removal by natural conduction or forced air cooling.

Price: 22¢/each (in production quantities). Delivery: immediate.

Thermolloy Co., 2130 Irving Blvd., Dallas, Tex. (PW, 11/20/61) SIC #3679



Carton Stapler

Has Two Stapling Heads

Machine with two stapling heads simultaneously staples both ends of full overlap boxes and telescope cartons after they have been packed. The machine has pneumatic controls with no electrical connections and takes cartons of any height or length within a width range of 3 in. to 30½ in.

Price: \$1,200. Delivery: 1 wk.

Container Stapling Corp., 100 S. 27th St., Herrin, Ill. (PW, 11/20/61) SIC #3579



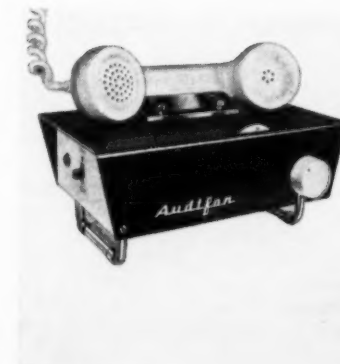
Dust Hood

Secures Under the Arms

Lightweight hood with respirator protects head and face from dust and has a replaceable vinyl window that permits wide vision. The durable twill cloth extends down to the chest and back and has straps that secure under the arms to hold it in place.

Price: \$15. Delivery: immediate.

Albert W. Pendergast Safety Equipment Co., Tulip & Longshore Sts., Philadelphia 35, Pa. (PW, 11/20/61) SIC #3842



Telephone Amplifier

Includes Radio

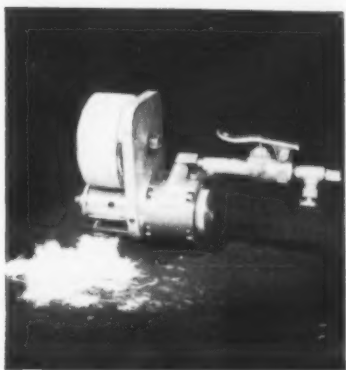
Telephone amplifier that runs on six AA type flashlight batteries picks up voices at a 15-ft. distance and has a volume control to let the user hear and talk without touching the telephone. The unit, which includes a transistor radio in the plastic case, is actuated by placing the telephone handset in the cradle.

Price: \$49.95. Delivery: immediate.

Audifon, P.O. Box 852, Sherman Oaks, Calif. (PW, 11/20/61) SIC #3661

New Products

Price data that accompany each product description are list or approximated prices supplied by manufacturers. Unless otherwise noted, prices quoted are for the smallest quantity that can be ordered.



Fiberglass Cutter

Runs at Fast Rate

Fiberglass cutter handles three strands of glass at maximum air pressure to deliver a high production rate of 7 lb. per minute. The machine breaks the glass strands against a rubber roller and permits a quick change of blades in the cutter head with the removal of a single nut.

Price: \$295. Delivery: 10 days.

Fabricating Systems, Inc., Bldg. 48, Hingham Industrial Center, Hingham, Mass. (PW, 11/20/61) SIC #3231



Dumet Cleaner

Removes Coatings

Cleaner for Dumet wire removes borate coating and copper oxides formed by fusing the wire to glass in electronic applications. It works with a single immersion at room temperature or up to 125 F and can also be used in ultrasonic equipment.

Price: \$3.40/gal. (plus container deposit in 12-gal. carboy). Delivery: immediate.

Fidelity Chemical Products Corp., 470 Frelinghuysen Ave., Newark 14, N.J. (PW, 11/20/61) SIC #2842



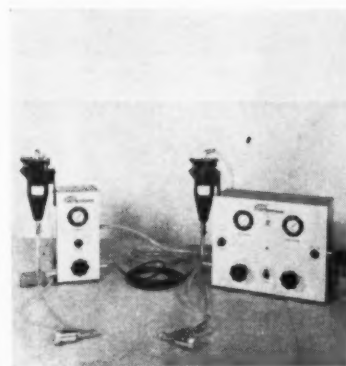
Tan Coating

Makes Cartons Reuseable

Coating material, packaged in a 16-oz. aerosol can, sprays on cartons to cover over printing and address labels. It leaves a tan coating that blends in with the color of the carton to make it reuseable. The spray dries rapidly and won't rub off.

Price: \$1.40 (in case lots). Delivery: immediate.

Crown Industrial Products Co., Dept. PW-7, 939 Amsterdam St., Woodstock, Ill. (PW, 11/20/61) SIC #2851



Solder Applicator

Doubles Output

Twin applicator for automatic production lines simultaneously makes two deposits of fusion paste solders or brazing alloys. Each unit has its own applicator gun and paste storage tank and can be individually adjusted for rate of deposit. In special applications each can also cycle independently.

Price: \$700. Delivery: 5 to 10 days.

Fusion Engineering, 17921 Roseland Ave., Cleveland 12, Ohio. (PW, 11/20/61) SIC #3548



Lifting Magnet

Is Lightweight

Aluminum-wound magnet with 61-in. dia. weighs less than conventional 55-in. magnets but has up to about 20% more lifting power. Stock sizes available are 39-, 46-, 56-, 61-, and 71-in. diameters, with other sizes available on special order.

Price: \$3,000 to \$11,000. Delivery: immediate to 3 wk.

Ohio Electric Mfg. Co., 5400 Dunham Rd., Maple Heights, Ohio. (PW, 11/20/61) SIC #3999

Current Research and Development

PAINT PRIMER improves service of acrylic emulsion paints on masonry according to a U.S. Navy Research Laboratory report. The new isocyanate primer-sealer is a free-flowing liquid with penetrating characteristics suitable for many grades of masonry both indoors and outside. Upon evaporation of a solvent, the solid isocyanate reacts with moisture in the atmosphere and ultimately cures to a tough, resinous film. One gallon of mix can be expected to cover about 350 sq. ft., according to the report.

MOLYBDENUM SHEET in thicknesses from .010 to .150 will be available from General Electric early in 1962. Made by both powder metallurgy and vacuum arc melting, the sheet will come from GE's new 120,000 sq. ft. refractory metals' plant. Molybdenum sheet alloyed with a .5% titanium is also on the schedule. Columbium sheet will be added to the product list in early 1963. All sheets come in 24-in. widths and "reproduceable" quality.

MICROMINIATURE COMPUTER using semiconductor networks that take less than 1% the space of conventional components is under development at Texas Instruments labs. The advanced experimental equipment has a total volume of only 6.3 cu. in. and weighs 10 oz. It uses 587 digital circuits each formed within a minute bar of silicon. The use of semiconductors in this computer demonstrates its capability for solving the problems of interconnections, heat dissipation, electrical interaction, and maintenance of high density packaging of complex electronic equipment. The individually sealed semiconductor networks (.25 x .125 x .030-in.) were assembled by welding 8 to 16 together in a stack and then encapsulating the stack to form a rigid module.

ZINC RICH PAINTS will be coming under study by three English zinc dust pigment makers under terms of a contract with the American Zinc Institute. Project is designed to develop paints with better adhesion, flexibility and welding characteristics for corrosion-resistant coatings on autos. Project will be followed up by a study on structural steelwork and marine paints.

WOOD FIBERS, formed by chemically dissolving away nonfibrous portions of the bark to leave a pure spindle-shaped fiber, are expected to find jobs as a reinforcing medium in molding compounds. Just coming out of a pilot plant at Weyerhaeuser Co., the fibers can replace sisal as a reinforcing material in polyester premix (Weyerhaeuser claims it is more economical, handles better), and can be used to reinforce phenolic compounds. Trade-marked WEF (Weyerhaeuser Extracted Fibers), the material consists mostly of a mixture of phenolic acids in the form of sodium salts and are available in powder as well as aqueous solutions.

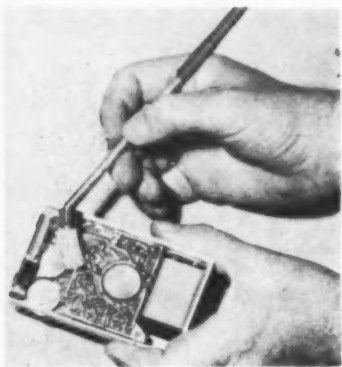
MEASURING INSTRUMENTS using the Laser principle of amplifying light are getting intensive study at Keuffel & Esser Co.'s Optics and Metrology Div. The first Laser instruments are designed to promote research and extend the practical use of Laser-oriented units in this brand new field. Among the possible applications being studied: interferometry in testing optical elements, checking plano-parallel plates, measurement of indices of refraction, high speed interferometer refraction, and monochromatic photography of microscopic objects.

SOLDERING METHOD FOR JOINING ALUMINUM TO STAINLESS at low temperatures, providing a gastight, durable bond, has been developed under an Atomic Energy Commission research grant. The stainless steel is cleaned with an abrasive, washed with trichloroethylene and coated with a solution of water and hydrochloric acid. The steel is then heated to 450F and tinned with a 50% lead, 50% tin solder mixture. The aluminum is cleaned, preheated to 650F and tinned with aluminum solder. The two surfaces are placed in contact and heated to 500-600 F with an oxy-acetylene flame to make the joint.

SMOKELESS COAL process that is both simple and cheap has been developed by the German Mining Assn. The coal is first dried, then made water repellent by addition of oil. The mixture is briquetted with the aid of thickened sulfite lye—and it is ready for use in any boiler or open chimney without producing smoke or soot.

LIGHT SOURCE so powerful that it would illuminate entire cities when hung at a height of 600 to 900 ft. has been designed by Soviet researchers. According to the Russian news agency, TASS, the lamp will cover 247 acres and can be used for such jobs as lighting construction sites, transport junctions, exhibition areas, and sports events.

Research spending in the U. S. will come to almost \$16-billion in 1962, according to a Battelle Institute economist. The government will account for about \$10-billion, industry \$5.5-billion (up \$600-million from '61) and universities and foundations about \$350-million. Research total in 1950: \$3-billion.



Miniature Brush

Attaches to Air Line

Miniature brush with hollow brass stem that is bent to a 45-deg. angle is suitable for air pressure and vacuum cleaning of intricate mechanisms. The brush head is threaded to fit the stem and comes with 1- or 1/2-in. trim size nylon bristles. Other materials including wire also are available.

Price: \$1.70 (brush head) and \$3.40 (tube). Delivery: 3 to 4 wks.

Weiler Brush Co., Inc., 2130 Lake Front Lane, Cresco, Pa. (PW, 11/20/61)

SIC #3981



Sentry Station

Resists Weathering

Sentry station made of rigid polyvinyl chloride comes in a complete range of sizes and a variety of window combinations—both fixed and triple-track. The white vinyl won't deteriorate under the severest weather conditions, and resists rot, rust, and corrosion.

Price: \$650 (5x5x8 ft.). Delivery: 2 wk.

S & C Mfg Co., 3533 Cardiff Ave., Cincinnati 9, Ohio. (PW, 11/20/61)

SIC #3999

BULLETIN: EARLY TABULATIONS SHOW NEW FLEET-SIZE LARK HAS WON ACCEPTANCE

'62 LARK FLEET ORDERS IN FIRST 3 1/2 WEEKS—

State of Connecticut • Railway Express Company • Avis Rent-A-Car, Miami • Winnetka, Ill. Police Dep't. • State of Florida • Yellow Cab Co., Erie, Pa. • F. W. Means & Company • University of California • Norwalk Tire Company Northern Illinois Gas Co. • Firestone Tire & Rubber Co. • City of Cleveland, Ohio • Frenat Cab Co., New York National Cash Register • Santa Clara County, Cal. • Convair Division, General Dynamics • City of Milwaukee, Wis. American Cab Co., Kansas City • State of Minnesota



HERE ARE THE REASONS WHY THE NEW FLEET-SIZE LARKS ARE GOING PLACES IN '62

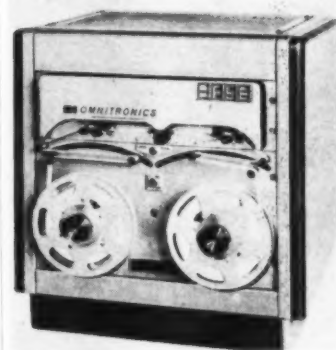
- **NEW 113" WHEELBASE**, 5 inches longer than Rambler Classic, gives luxurious ride and room... a bigger car than any other at the same price.
- **NEW INTERIOR DIMENSIONS** provide legroom comparable to Cadillac—over 6 inches more legroom than Plymouth, over 12 inches more than Corvair Monza!
- **NEW HEADROOM** in front is 40"—a full inch higher than the Fairlane. New headroom in back is 39 1/2"—a full inch and a half higher than the Fairlane. (When we say "room for six-footers" we mean it.)
- **FLEET-PROVED POWER** in lively Six or choice of two V-8's—112 to 225 HP! Five body styles to choose from, with wide choice of trim, colors and options—the widest offered by any manufacturer!
- **NEW FINE-LINE STYLING**, a longer car with smart European design, wins quick acceptance with fleet-car drivers. Glamor-styled but taxi-tough!

- **GO-ANYWHERE STAMINA**, with high ground clearance—even on off-highway trails, The Lark takes the most beating with least complaint. Heavy Duty equipment is available on every model.
- **COMPACT SIZE PRICE TAG** on the Fleet-size Lark—only the first of many savings! Lowest maintenance and repair have been proved in Lark fleets across the country, for years. Endurance-built quality keeps operational costs low... keeps trade-in value right up among the top few makes!

new '62 LARK
BY STUDEBAKER

GET THIS VALUABLE INFORMATION RIGHT NOW! PW-11-20-62-2
Send me all the data on the '62 Fleet-size LARK.

Name _____
Title _____
Company _____
Address _____
City _____ Zone _____ State _____
Mail to: A. E. Fitzpatrick, Studebaker Fleet Department, South Bend, Indiana.



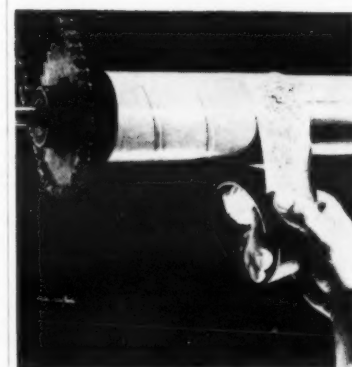
Paper-Tape Reeler

Rewinds

Unidirectional paper-tape reeler supplies tape at any speed up to 40 ips. and rewinds at from 45 ips. to 60 ips. When operated with a tape reader it feeds from right reel to left under reader control and rewinds from left to right under its own control. A motor and brake assembly for each reel shaft provides positive prevention of tape breakage. The unit mounts in any 19-in. relay-rack enclosure and takes NAB reels up to 10 1/2 in. in diameter.

Price: \$665. Delivery: 4 wk.

Omnitronics, Inc., 511 N. Broad St., Philadelphia 23, Pa. (PW, 11/20/61) SIC #3999



Anti-Friction Tape

Has Teflon Backing

Pressure-sensitive tape with 10-mil backing of Teflon and electrical grade silicone adhesive resists friction. Uses include lining of chutes and rails, wrapping of rollers, and any similar applications, in which it keeps sticky impregnants, sizings, chemicals, and other products being handled from building up. It also can be used for electrical insulation.

Price: \$22.40 (1-in. wide x 18-yd.). Delivery: immediate.

Permace, New Brunswick, N. J. (PW, 11/20/61)

SIC #2295



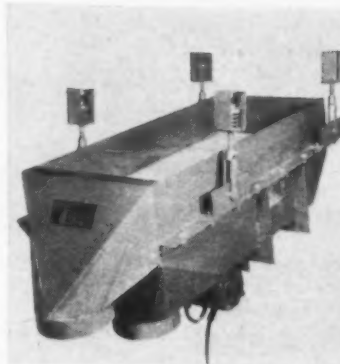
Welding Goggles

Have Pliable Sides

Goggles for oxy-acetylene welding and cutting work have pliable sides that fit facial contours. They resist welding and cutting heat and cold weather; they won't harden or become brittle under rapid temperature changes. Goggles come with lenses of a variety of densities and thicknesses, including hardened lenses for impact hazards.

Price: approx. \$3.25. **Delivery:** immediate.

Linde Co., 270 Park Ave., New York 17, N. Y. (PW, 11/20/61) SIC #3842



Electric Feeder

Screens Dust

Electric feeder screens dust from chunky materials and deposits each in separate container. Two flat chambers are divided by a screen or grid that sifts small particles into the lower chamber. Besides dust, it can be used for any process in which different sized particles must be separated.

Price: \$1,195. **Delivery:** 6 wk.

Cleveland Vibrator Co., 2828 Clinton Ave., Cleveland 13, Ohio. (PW, 11/20/61) SIC #3999



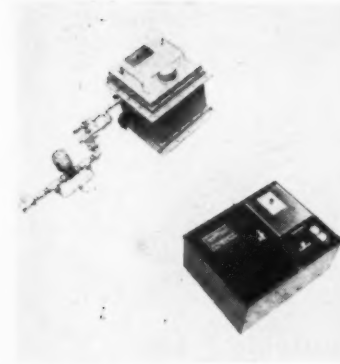
Warning System

Does Four Jobs

Warning and communications system for emergency vehicles can be used with any style microphone or any make two-way radio system. The 75-w. unit is a combination siren, public address system, and radio amplifier, and has a fourth alert signal intended to attract instant attention. The compact system is 5 5/8 x 6 3/4 x 3 1/4 in. and has an adjustable mounting yoke that permits installation in several positions.

Price: \$238.50 (without microphone). **Delivery:** immediate.

The Fyr-Fyter Co., 221 Crane St., Dayton 1, Ohio. (PW, 11/20/61) SIC #3662



Vapor Generator

Eliminates Oxide Scale

Vapor generator is designed to eliminate oxide scale formation during hot working of metals. It injects vapors of lithium compounds into working atmospheres of hot mills and furnaces to keep metals bright and clean. The compact chamber, fitted with a standard burner that utilizes plant gas, can be attached to the wall of the hot mill or furnace with electrical controls mounted nearby or at a remote spot.

Price: \$2,000. **Delivery:** immediate.

Lithium Corp. of America, 500 Fifth Ave., New York 36, N. Y. (PW, 11/20/61) SIC #3999



Now we're set for a big future! Thanks for insisting!

Include the Graybar man in your electrical planning.

The recommendation he makes comes from experience with countless kinds of power distribution equipment, motors, controls, wiring and lighting supplies.

Call Graybar for impartial recommendations . . . and able, in-the-plant help. We'll work with you or your electrical contractor.

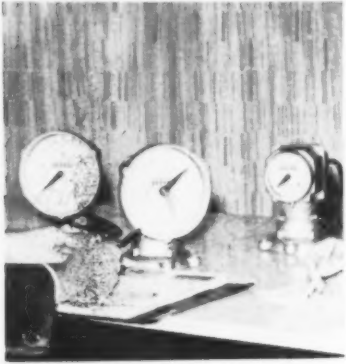
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GraybaR

ELECTRIC COMPANY, INC.

420 LEXINGTON AVENUE, NEW YORK 17, N. Y. - OFFICES IN OVER 130 PRINCIPAL CITIES





Reset Controller

Works Automatically

Automatic reset controller meters predetermine quantities of softened water or other liquid and then resets itself automatically for the next cycle. It sends out a signal to start the regeneration cycle on fully automatic water conditioning equipment.

Price: \$133 (plus meter). **Delivery:** 2 wk.
Badger Meter Mfg. Co., 4545 W. Brown
Deer Rd., Milwaukee 23, Wis. (PW,
11/20/61) SIC #3622



Drilling Machine

Has 1 1/4-in. Capacity

Drilling machine with dial-type speed selector has a motor integrated in the head for direct, all-gear drive. Drilling, capacities are 1 1/4 in. in cast iron and 1 in. in steel; drilling depth, 4 1/4 in.; swing, 23 1/2 in. One model with six spindle speeds ranges from 115 rpm. to 3,240 rpm.

Price: from \$560. **Delivery:** immediate.
Bentley Industrial Corp., 21-19 46th
Ave., Long Island City 1, N. Y. (PW,
11/20/61) SIC #3541

LET MUELLER MAKE IT!

Mueller Brass Co. of Port Huron is much more diversified than the name "Brass" implies . . . a lot more. In fact, because of its many and varied facilities . . . its men, methods and metals . . . Mueller is in the unique position of being able to offer true single source service.

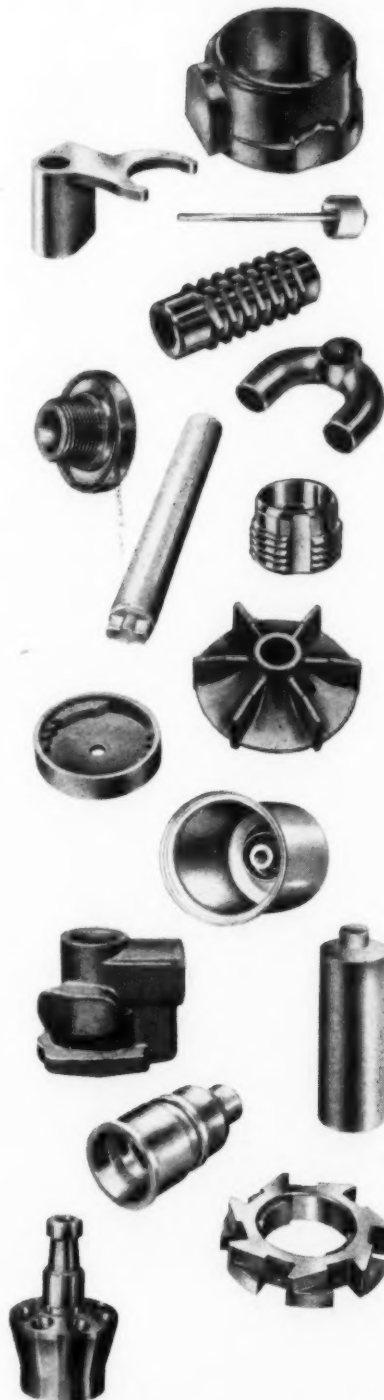
MUELLER HAS THE MEN . . . experienced engineers with the ability to work out, creatively, tough design problems, and improve a part or components for production by the most economical method. You get sound engineering plus 44 years of practical metalworking production experience when you "Let Mueller Make It".

MUELLER HAS THE METHODS . . . when you "Let Mueller Make It", you are utilizing one single source that is able to produce parts any one of these ways: as forgings, impact extrusions, sintered metal parts, screw machine products, formed tube or as castings.

MUELLER HAS THE METALS . . . and the materials . . . to produce precision parts in aluminum, brass, bronze, copper, iron and steel in hundreds of different alloys to meet each exact requirement.

In addition, Mueller Brass Co. has complete and modern facilities for performing all types of finishing and sub-assembly operations. Another plus value is nation-wide sales engineering service.

So, in the final analysis, no matter where you fit in the American industrial picture, whether you're making missiles or mowers . . . and no matter where you're located, it will pay you to LET MUELLER MAKE IT!



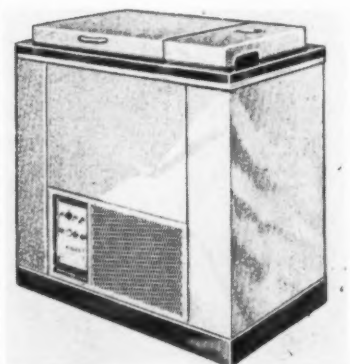
Self-Priming Pump

Delivers 7,200 Gph.

Portable, 2-in., self-priming pump permits replacement of pump or engine in the field within 15 min. without dismantling. It is powered by a 4-hp., air-cooled engine, primes rapidly on suction lifts up to 25 ft. and pumps up to 7,200 gph. The stainless steel pump shaft fastens to the engine shaft without screws, keys, or threads, and completely protects the engine shaft from corrosion and wear.

Price: \$197.50. **Delivery:** 7 to 10 days.

Hydr-O-Matic Pump Co.,
Hayesville, Ohio. (PW, 11/20/
61) SIC #3561



Circulating Bath

Flows Hot or Cold

Circulating bath for laboratory use flows hot or cold to regulate the temperature of test equipment. Within a 0 to 100 F range, it keeps 20 gal. of water, oil, or any other suitable liquid within ± 0.25 F of the desired temperature. The stainless steel tank measures 15 x 27 x 13 in. and holds an adjustable rack that can be set 3 in., 5 1/2 in., or 8 1/2 in. above the bath's bottom. Cooling capacity is about -890 Btu/hr. and heating capacity is 2,950 Btu/hr.

Price: approx. \$1,025. **De-**
livery: immediate.

Fisher Scientific Co., 389
Fisher Bldg., Pittsburgh 19, Pa.
(PW, 11/20/61) SIC #3569

M MUELLER BRASS CO. PORT HURON 31, MICHIGAN

349

Product News in Brief

Telecommunication Units

White Plains, N. Y.—IBM has developed two telecommunication units that allow direct transmission of data in computer language over the telephone. The new units can handle input from punched cards, magnetic tape, or core memory.

The new devices, which transmit at speeds up to 300 characters a second, double the speeds of previously announced tape-to-tape and tape to memory IBM equipment. The 7702 magnetic tape transmission terminal can handle data recorded on tape, while the 1013 terminal works with cards.

Data from punched cards can be recorded directly on magnetic tape or tape output can be fed to cards by the system. In addition, the card and tape terminals can also communicate with similar units. When linked to an IBM 1009, either terminal can transmit information for direct input or output with an IBM 1401 or 1410 computer.

The 7702 rents for \$1,300 a month and costs \$58,000 with delivery quoted at 10-12 months. The 1013 rents for \$800, costs \$44,000, and will be available in 14-16 months.

Water Treatment

Akron, Ohio—The B. F. Goodrich Co. has received exclusive rights to market water treatment equipment developed by the Mead Corp. The equipment uses a rigid vinyl plastic filter in place of conventional broken rock or tile.

While the first vinyl-cored plant was designed specifically for treating pulp and paper waste, Goodrich says the same principle holds significant advantages for sewage treatment plants and industrial waste units.

Vinyl filtercomb units are said to be more efficient than stone trickling beds. The filters, about 4 ft. long and 2 ft. wide and deep, can be stacked to heights of 40 ft. or more. The vinyl filter units are made by joining alternate sheets of corrugated rigid vinyl to flat sheets.

Wide Range Diesel

Detroit — General Motors' Electro-Motive Div. has introduced a new high speed, heavy drag, general purpose diesel locomotive—called the widest range unit on the rails.

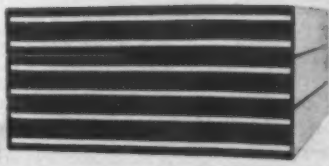
Electro-Motive claims some 30 structural and operational improvements in the new model, which sells for \$195,500. The price per horsepower of the 2,250 hp. unit comes to \$86.89.

A new motor with a 27½% greater operating range than previous models gives a continuing tractive effort of 50,000 lb. at 12 mph. Fuel capacity of the locomotive has been increased to 2,550 gal., a 9% increase. Horsepower is up 12½%, while dynamic braking capacity is one-third greater.

Elastomeric Bearing Pads

Erie, Pa.—Lord Mfg. Co. is marketing a standard line of laminated elastomeric bearing pads for bridge construction that the company claims will replace

custom pads now in general use. Use of standard pads, Lord notes, will simplify design prob-



lems for bridge engineers and cut costs. The laminated pads allow for expansion and construction by providing longitudinal freedom between beams and supporting piers. Rocker arm and sliding plate devices are not needed.

Bonded neoprene construction is used in the laminated pads which meet all existing state highway specifications. They are produced in two basic sizes: 25x8x1¼-in and 12½x8x1¼-in. Stacking pads in multiples permits them to meet various load conditions.

New Heat Treatment

Pittsburgh—Aluminum Co. of

America has announced a new heat treatment that is said to virtually eliminate stress cracking for high strength wrought aluminum alloy 7075.

The new thermal treatment, designated T-73 greatly increases the alloy's ability to withstand, without cracking, high, sustained, surface tension stresses.

The T73 temper is a supplement, not a replacement for the standard T6 temper, which remains the recommended choice when high surface tension stresses are not a factor since it gives greater tensile strength. Alloy 7075 die forgings and rolled rod and bar are now commercially available in the new T73 temper.

"When we're looking for new local suppliers, we look to the Yellow Pages,"

says Al Lunn, Chief of Purchasing — Stores, United Air Lines, Denver, Colorado



America's buying guide for over 60 years!



"It's always surprising when we stop and realize how many different suppliers we locate through the Yellow Pages."



"We do a lot of purchasing here in Denver, and rely on the Yellow Pages to locate suppliers, get quotations."



"We keep a Yellow Pages library on hand to help us with the local purchasing we do in towns where we operate."



"The Yellow Pages also helps us dispose of various pieces of equipment that we no longer have any use for."



RIGHT-HAND DRIVE: International Harvester's Scout truck now is being sold with right-hand drive, optional at \$14. Right-hand drive is designed for rural mail carriers and others who desire curb-side entry.

Two Burton Mfg. Units Move Into New Facility

Santa Monica, Calif.—Burton Mfg. Co.'s Instrument Div. and Trans Electronics, Inc., a wholly owned subsidiary, have moved into a \$250,000 plant in Northridge, Calif. Burton produces aircraft indicating instruments, such as the accelerometer used in the manned space capsules, and test and calibration equipment for pressure sensitive systems on commercial and military jet aircraft. Trans Electronics manufactures precision-performance power supplies and semiconductor test equipment.

Leybold Designs Standard Elements For Semiconductor Production Line

Cologne, Germany—A line of standardized, modular elements that can be purchased from stock and assembled into a customized production line to make semiconductors has been developed by the Leybold Co.

A series of standard elements have connections and production track at the same level to allow easy installation. The major system components are:

- Linear glove box with vacuum-tight energy and measure-

ment transmission, inspection windows, and two apertures equipped with plastic gloves. It can be evacuated down to 10^{-3} Torr.

- Glove boxes in T-sections and large cross-piece designs that are suitable for installing auxiliary equipment such as spot welding machines and presses.

- Vacuum furnace with temperature range from 20 to 350°C designed for operation with protective gases.

- Interlocks suitable for charging and discharging material in vacuum or inert gas without interrupting cycle.

General Motors Unveils New Diesel Locomotive

Midland, Mich.—Dow Chemical Co. has changed the product designations on its major foam insulating products to reflect new sizes, improved properties, and specific building uses.

The company will discontinue all but blue, flame-retardant types of Styrofoam for building insulation. The new designations are:

- **Thurane FR.** A flame retardant board, still under development.

- **Styrofoam FR.** Flame retardant board with improved thermal insulation value.

- **Styrofoam CB.** Core board 24 in. wide and 8 ft. long and 1/4 in. thick for use as the insulating core in panel construction.

- **Scoreboard FR.** Perimeter insulation board.

- **Roofmate SP.** Board wrapped in kraft paper designed largely for roof insulation.

German Electron Tubes

Dallas — United Electronics Co., Newark, N. J., has signed an agreement with Siemens & Halske to market German-made electron tubes in the U. S. United, itself a tube producer, is a subsidiary of Ling-Temco-Vought, Inc., Dallas.

Where Can I Buy?

Some products are easy to locate, others difficult. Perhaps you can help one of our readers who knows exactly what he wants but doesn't know where to get it. And keep in mind that you can make use of this Purchasing Week service at any time.

While you are answering our reader's request, would you also send us a carbon copy of your answer?

"We are looking for a 1/4 turn fastener for use on a household appliance that can easily be operated without tools by a housewife. This 1/4 turn fastener will be used to close a cabinet door in the back of a portable unit that will require opening and closing at least twice a day. The size of the 1/4 turn fastener required should not exceed 2 in. on any dimension."

J. D. Keating, Buyer
Dominion Electrohome Indus., Ltd.
Kitchener, Ont.

REAL ECONOMY IN PROCESS PIPING IS A MATTER OF SPECIFICATIONS—AND SPEEDLINE FITTINGS!

Make the most of both. First, be sure to check ASA B31.3 for up-to-date pressure-temperature data on critical process applications. This most recent issue of the Code for Pressure Piping certifies the use of light-wall pipe and fittings to a degree not recognized by outdated specifications.



SPECIFY LIGHT-WALL PIPE and get up to 50% more pipe for your dollar

Next, consider the installation advantages of Speedline's improved fittings design to capitalize on light-wall piping savings. Note Speedline's "tangential feature" . . . the extra length of straight on every end of every Speedline Fitting. This extra clearance eliminates alignment problems and speeds welding . . . permits joints to be readily butt-welded, flanged, or socket-welded. You choose the most practical, cost-saving joining method for your application—

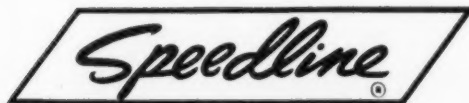
and one fitting can be used all ways when you specify Speedline Fittings.

Compute total savings in terms of initial costs and ultimate installed costs. Light-wall pipe and fittings, of course, cost less to begin with because they use less metal. Speedline versatility, however, adds *extra* savings in installation time and labor costs that further reduce final installed costs.



SPECIFY SPEEDLINE FITTINGS and reduce installed piping costs to a minimum

Piping standards have changed. It will pay you to be up-to-date with light-wall specifications that call for Speedline Fittings. Get details from your nearby Speedline Distributor today. He's listed on page 1494 of Chemical Engineering Catalog.



CORROSION-RESISTANT FITTINGS

STAINLESS STEEL • ALUMINUM • NICKEL
OTHER ALLOYS ON APPLICATION

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A PRODUCT OF HORACE T. POTTS COMPANY • 588 E. ERIE AVENUE, PHILADELPHIA 34, PA.

Supplier Complains About Inventory Problems

(Continued from page 1)
weighed any short-term price benefits for the oil industry.

"We have pursued our short-term cost-cutting program to the limit, and we are still falling short of generating the profits required for investment to maintain and improve our competitive position," he said. "If prices are increased, the increases will be borne of extreme necessity."

Maxwell said the \$100-million tubular inventory carried by the steel companies for the oil industry is "unique in that no other steel consuming industry is receiving such gratuitous service."

The parts plan reviewed by Schaffer calls for "the reduction of spare parts inventories and the corresponding working capital necessary to sustain them."

Standardization Program

Making an interim report on a spare parts utilization program inaugurated two years ago by the NAPA's Petroleum Industry Buyers Group, Schaffer stressed the importance of standardization of spare parts identification and nomenclature and adoption of a cataloging method to determine the availability and interchangeability of parts. Schaffer, who is chairman of a buyers' group committee assigned to develop the program, said it focuses now on four main areas:

1. Disposition of obsolete items.
2. Purchasing of less spare parts protection by having manufacturers shoulder a greater part of the inventory burden.
3. Purchasing new equipment that can be interchanged with existing equipment.
4. Providing interchangeability data on existing equipment, a project which Schaffer terms the most profitable of the four methods.

In his report, Schaffer urged

New Pelletizing Facility To Cost \$60-Million

Montreal—A \$60-million iron ore pelletizing plant is being built in Labrador. The plant, with an initial capacity of 5.5-million tons, will be completed in 1963.

The plant is owned by Carol Pellet Co., a new firm, and will be operated by the Iron Ore Co. of Canada. Carol is owned by National Steel Corp., Bethlehem Steel Corp., Republic Steel Corp., Armco Steel Corp., Wheeling Steel Corp., Youngstown Sheet & Tube Co. and Hanna Co.

Iron Ore will also operate an adjoining concentrating plant to supply ore for the pelletizing operation.

close cooperation between purchasing agent, engineer, and stores manager in compiling a spare parts catalog.

The minimum checklist of information urged for such a cata-

Although initially this is a time-consuming effort, the system provides an effective means of inventory control, Schaffer said.

Schaffer also is working for acceptance of a standardized



STANDARDIZATION DRIVE: NAPA Petroleum Buyers Group Chmn. H. C. Cowdery (l) and L. E. Schaffer, standards committee head, report at Chicago meeting on oil industry action on inventory reduction problem.



log includes: part description, manufacturer's identity number, location in storehouse, material, serial number, refinery location, storehouse inventory number, unit price, and quantity on hand.

form for spare parts reporting. "At this time one of our most serious problems is the multiplicity of systems used by oil companies in cataloging their spare parts," he said.

Gulf and Humble Begin Marketing New Economy Brands of Gasoline

(Continued from page 1)
ments, each company eliminated its top premium line in test market areas. Primary objective of the companies is the compact market, although each says that the lower-octane grades will adequately service "at least half" the cars on the road.

Other major oil companies are carefully watching developments, but none indicated they had similar plans yet.

Gulf's move expands the three-grade marketing system it initiated in San Antonio on June 28 when it introduced Gulfthane and dropped its top Crest line to free pumps for the economy grade.

Gulfthane is lower in octane rating than the company's regular Good Gulf which Gulf now is upgrading. The higher-test No-Nox is being moved up also into a super-premium gasoline to be called New No-Nox which has heightened speculation regarding the future for Crest.

Humble is just now introducing its new gasoline, to be called Enco Plus, in Texas and Esso Plus in the East, which falls between the octane ratings of its regular and premium grades. In test markets, Humble too will halt marketing of its top grade, Esso Golden, to free pumps for the intermediate line.

Humble has not announced the

price of its intermediate grade other than to say that it will fall between the prices of its regular and premium grades. Final price will be set soon, however, since sales are scheduled to start before the end of the month.

Humble will initially market its new gasoline in Texas and the Pittsburgh and Norfolk-Newport News areas. Gulf's plans will broaden the Gulfthane market—all addition to Indianapolis, Buffalo-Niagara Falls, and Norfolk-Newport News—throughout the Rio Grande Valley and Charlotte areas.

Closing Dates Set

Cornwall, Ont.—The Canadian St. Lawrence Seaway Authority said Seaway canals will start closing for the winter at midnight Nov. 30. The schedule of closings may be advanced if there is bad weather or ice conditions.

Canals to be closed on Nov. 30 include the South Shore Canal (Montreal to Lake Louis), Beauharnois Canal, Iroquois Canal, Lachine Canal and Cornwall Canal. The Sault Ste. Marie Canal is due to be closed at midnight Dec. 12 and the Welland Canal and Third Welland Canal on Dec. 15.

Purchasing Week's

Purchasing Perspective

(Continued from page 1)

which way you peddle or how you buy, more and more customers are making price an even bigger factor in their purchase decisions.

The oil industry now is recognizing what many other consumer goods retailers found out a long time ago. Variety of product both as to price and product is the key to more business. That's why you find Gulf now going into direct competition with the gasoline discounters and so-called "private" brands, and Humble announcing a new intermediate grade of automobile fuel to match in some respects the expanded Detroit supermarket of odd-size makes and models. Note here too the emphasis on lower costs and prices.

In submitting purchasing estimates for 1962 don't forget to make a point-by-point assessment of all indirect costs that could sneak up on you and your other top management. Unless your firm has an active program to reduce its indirect expenses, higher costs can put a lopsided bulge in your early purchasing estimates for 1962.

The cost of maintaining industrial plants has risen 50% since 1950. And McGraw-Hill's *Factory*, magazine reports that these figures will continue to climb unless industry clamps down. The critical areas of indirect costs—the sleepers in the manufacturing and purchasing budgets—are **housekeeping** (factory cleanup, snow removal, etc.), **employee services** (cafeterias, discounts, insurance, recreation programs, pensions, social security, etc.), **basic maintenance** (upkeep and repair of buildings, grounds, and equipment), **material handling** (an estimated 15¢ of every manufacturing dollar goes for labor and equipment to move materials and products through manufacturing to shipping), **paperwork, plant protection** (protection against inventory shrinkage is involved here), **Quality control, tools and supplies, utilities, and staff services.**

BUYERS' GUIDE—More and more firms are looking into the possibility of providing **employee fallout shelters**. Relatively few firms have them so far, but demand is increasing, according to several manufacturers of air purification equipment. Most common action taken so far in connection with war or catastrophe planning is to provide for safeguarding of company records. A National Industrial Conference board survey of more than 200 companies showed less than 5% have built fallout shelters, but 40% have provided for bank vault or underground storage of records. . . **Engineers** are predicting that plans to pipeline coal 300 miles to the East Coast from the Ohio Valley will be only the beginning of a new era of materials transportation. According to Charles C. Whittelsey, president of a New York engineering firm, giant pipelines one day will carry ore, grain, and chemicals as well as coal. Pipelines also will act as elongated mixing vats in which different raw materials will be processed during their overland transit.

Sterling Oil in Two-Pronged Move To Develop U.S. Manganese Deposits

New York—Sterling Oil Co. of Oklahoma, Inc., has taken two important steps to end American reliance on imported manganese ores. The action was reported exclusively last week by the *Engineering & Mining Journal*, a McGraw-Hill publication.

Sterling has acquired exclusive rights to a process for production of high purity manganese dioxide and, as a result, has signed an agreement with Century Mining Co. of Arizona for 350,000 long tons of manganese ore over a five-year period.

The total involved in the transactions was \$7-million, the *Journal* reported.

Century will extract and concentrate ores at the rate of 1,200 tons/day at its plant in Wenden, Ariz., while Sterling will build a \$1.75-million manganese dioxide treatment plant nearby. Engineers estimate that Sterling's annual capacity will be 25,000 tons.

Details of the manganese dioxide process, which reportedly can treat ores containing as little as 15% manganese, are still secret. Previously American manganese deposits were of too low grade for commercial use and the U.S. was forced to rely on the higher quality ore imported from Ghana and Morocco.

Los Angeles Increases Harbor Dockage Rates

Los Angeles—Los Angeles harbor dockage rates have been boosted 33% and similar hikes are expected to follow shortly at other California Ports.

The increases were recommended by the California Assn. of Port Authorities to eliminate deficits from shipping services. Other ports where increases are expected are San Francisco, Oakland, Richmond, Stockton, Long Beach, and San Diego.

Price Changes for Purchasing Agents

Item & Company	Amount of Change	New Price	Reason
REDUCTIONS			
Floor tile, vinyl asbestos.....	2.6%-11.5%	competition
Group "B" asphalt, Kentile.....	3.3%	competition
Diocetyl azelate, Eastman, tankcars, lb.....	.02	.39	cost cut
Maleic anhydride, tankcars, lb.....	.01	.215	oversupply
Fumaric acid, 250-lb. containers & bags, crlts., lb.....	.005	.2275 & .2225	oversupply
Roof insulation, Allied Chem., Nov. 24, 1000 sq. ft.....	\$6.00	\$80.00	competition
Selenium, comm'l & 99.99% electronic grades, lb.....	.75	\$5.75 & \$6.75	competition
Lead, refined, N. Y. & St. Louis, lb.....	.005	.10 & .098	slow demand
Lead sheet & pipe, lb.....	.005	.155	metal cut
Lead oxides, local, lb.....	.005	.1325-.16	metal cut

Power Tools More Versatile, Easier to Use

New York — New portable power tools coming on the market have higher capacities, are easier to use, and are more portable than their predecessors. A PURCHASING WEEK survey of major tool producers also found most makers broadening product lines to meet varying user requirements.

Electric drills in various capacities from 1/4-in. to 1 1/4-in. still represent the biggest volume of industrial sales, with abrasive tools (sanders, grinders and polishers) second. Saws, impact wrenches, nut and screw drivers and metal shears make up most of the remainder.

Automation Hits

Tool makers report that production line use of portable electric tools has held steady or decreased in recent years, while maintenance uses have gone up. Increased automation, which has eliminated hand jobs, and a switch to pneumatic tools were given as chief reasons for the production line dropoff.

The woodworking industry is the one exception to the production lag—sales have grown about 50% faster than the industry itself. Portable routers and planers were hardly used at all 10 years ago; now they are a big seller. Belt and orbital sanders and circular saws remain the top items.

The rash of new tools (Thor, for example, says new products accounted for 18% of sales in the past three years), has meant cheaper models in many cases as manufacturers have come out with low-cost units tailored to lighter jobs. The old policy was to build tools to meet the roughest needs.

Manufacturers still build high quality, all ball-bearing tools, but low-rated units for intermittent use instead of eight hours a day duty are now available.

New higher capacity tools are winning jobs that were considered too tough before. Black & Decker's new nibbler, for example, can handle 8-gage metal as compared to a 12-gage limit on the old model. H. K. Porter's new "Dirk" drill is capable of going through 2 3/4-in. concrete in 17 seconds.

Stress Versatility

All makers are concentrating on making their equipment more versatile and easier to use. Porter Cable's new circular saw has a built-in clutch to enable the blade to slip when it is overtaxed. The saw also has a new "one-hand" blade change system. Skil's new lightweight 1/2-in. drill weighs only 4 1/2 lb.

Portability, always a chief factor in power tools, is getting new impetus as more "go-anywhere" cordless products appear. Black & Decker's battery-powered drill and Siegler Corp.'s gasoline-powered circular saw, are expected to be pace-setters in the industry.

Black & Decker reports that reception of its first model cordless drill has been "exceeding expectations." The company plans to market a heavy duty, higher power model tailored to industrial use about the middle of next year.

Maintenance features are also coming in for their share of at-

tention. Skil and Thor have both come out with motors they claim to be burnout-proof. The motors use no fuses, but are built without solder that could melt. Special insulating materials are used to let the motor overheat without burning out.

Here's a rundown on the newest tools available:

• **Porter-Cable.** Power block plane (\$54.50) for edge planing wood with one hand; circular torque saw (\$125) that is 7 1/2-in. high with micro-adjustable clutch for any degree of slip needed and shaft lock that allows changing blade with one hand; finishing sander that takes one-half sheet of 9x11-in. sandpaper.

• **Black & Decker.** Sheet metal nibbler (\$330) has power of two ton press and can cut 8-gage metal; drywall screwdriver (64.-50) drives mounting screws to exact preset depth in either wood or metal studs; 1/2-in. right angle drill (\$95) makes it easy to put holes in hard-to-reach locations.

• **H. K. Porter.** 1/2-in. drill (\$30) has offset housing to clear close obstructions; "Dirk" 1/2-in. drill (\$30) goes through concrete

slabs in short order and has integral container on drill body to hold extra bits.

• **Griseer Industries.** Portable, horizontal metal-cutting band saw weighs 42 lb. and uses a 1/2-in. by 59-in. blade to cut rectangles up to 3 1/2 x 6-in., diameters to 3 1/2-in. and angles to 45 degrees on sizes up to 3 1/2 x 3-in.

• **WPB Industrial Products.** Power shear (\$69.50) handles sheet metal, coils, plastics, aluminum, brass and copper and weighs only 4 1/2-lb., works on 110 v.

• **Wells Mfg.** Electric hand saw (\$79.88) looks like conventional saw, has a 1 1/8-in. stroke and 8-in. maximum cutting capacity. It weighs 8 lb. and gives 8,000 cutting strokes a minute.

• **Siegler.** Portable 8-in. circular saw (\$119.95) uses 3/4-hp. gas motor to cut to a depth of 2 3/4-in. at 90 degrees. Gas supply is good for 1 hr.

• **Thor.** Heavy duty drill (\$67.50) will make 1/2-in. holes in metal or 1-in. in wood with 3-amp motor; reciprocating saw (\$49.95) is designed for light duty use; jig saw (\$99.50) can handle a variety of jobs.

New 'Sell-Em-the-Works' Twist Getting Big Play From Vendors

(Continued from page 1)

lube plan—and are designed to cut maintenance time and costs and reduce the number of individual oil products required.

• **Computer manufacturers** such as International Business Machines Corp. and TRW Computers Co., a division of Thompson-Ramo-Woolridge, are working out mutual support agreements with manufacturers of basic industrial process equipment and controls. Goal is to provide the buyer with automatic systems for total industrial control.

The new GE system prices are contained in handbook sheets, similar to those used to present buying information on individual products. The handbooks cover basic systems in the paper, metal rolling, printing, rubber, mining, and cement industries.

George W. Knapp, manager of the company's Systems Sales and Engineering Operation, points out that the new approach—in addition to providing the P.A. with complete information on systems applications, functional performance and equipment specifications—enables him to make a dollar straight evaluation of the difference between alternative systems.

GE's systems prices take into account clearly defined engineering and service contributions as well as the individual components of a system. The company has worked out a scale of charges for what it terms "systems start-up service," which ranges from 1.3% to 5% of the total cost of the components, depending on the size of the cost and the complexity of the system.

For example, the major elements of a typical electric paper-machine drive system would consist of a Couch drive using a 300-hp. motor costing \$32,840 and two 200-hp. motors costing \$28,760 each for the wire turning roll and first press drives.

Total cost of all the components in the system would be \$117,959. The systems start-up charge would be 2.1% of this amount, making a total price of \$120,436.

GE admits that a customer could "probably pay less" if he bought the components of one of the basic systems separately. But, the company claims, any price advantages should be canceled out by the fact that GE takes responsibility for putting together the system and assuring that it will work.

As far as the oil companies are concerned, systems selling also is essentially a service—and in their case the service is free of charge. Here's how a typical lubrication program works:

An oil company specialist makes an inventory of all machines in the factory and their use. Lubrication points and the types of lubricants used are recorded. This material then is forwarded to the oil company's home or district office where it is organized and a file prepared.

The file contains: 1) a lubrication schedule (Texaco even includes floor maps showing the oiler's rounds); 2) the lubricant list. In most cases the number of lubricants is reduced (Mobil cited a drop from 44 to 18 in one instance), and the products are listed by brand name rather than specification. Programs for re-use of lubricants also are drawn up.

The factory's lubrication engineer keeps tabs on machine operations and maintenance and alters the lubrication schedule according to formulas prescribed by the oil company. (Mobil has worked out a data processing system to do this at Pratt & Whitney's 12,000-machine plant in East Hartford, Conn.)

The oil company's specialist makes periodic checks to iron out any bugs in the system and brings it up to date with any equipment changes. The service is, of course, dependent on the factory's con-

Late News in Brief

Paper Industry Backs Reciprocal Trade Pacts

New York—The paper industry has called for extension of American reciprocal trade agreements. Howard E. Whittaker, president of the American Paper & Pulp Assn., said extension is necessary if the industry is to continue to compete in the European market.

Lockheed to Open W. Va. Plant

Marietta, Ga.—Lockheed-Georgia Co. will open a C-130 Hercules aircraft subassembly plant in Clarksburg, W. Va. Training of 200 new employees for the 51,000 sq. ft. plant will start next month. President Kennedy praised the firm's decision to open a new plant in an area hard-hit by unemployment.

Ford Cuts Seat Belt Prices

Detroit—Ford Motor Co. has cut the price of its auto seat belts by about 20%. Factory-installed seat belts will now sell for \$16.80 per pair, down from \$20.60. The price of single belts sold at retail was cut from \$12, plus installation, to \$9 and \$9.50, plus installation.

FTC Barred From Access to Records

Philadelphia—The Federal Trade Commission has been denied access to the grand jury records in the electrical price-fixing case. Federal Judge Harold K. Wood said secret testimony in a criminal case can't be used in a possible civil action. The FTC wanted to check whether the electrical companies had violated a 1937 FTC ruling on turbine and condenser prices.

Three Paving Supply Firms Cited

Miami—Three Ft. Lauderdale, Fla., paving supply firms and their presidents have been indicted on criminal antitrust charges. The Federal grand jury said South Florida Asphalt Co., East Coast Asphalt Co., and R. H. Wright, Inc., conspired to rig bids and raise prices on asphalt sold in the state.

RCA Develops New Alloy

New York—Radio Corp. of America has developed a new alloy for converting heat directly into electricity at efficiencies not far below those of gasoline engines. RCA said this could lead to a breakthrough in practical uses for thermoelectric devices.

Unveils New Transistors

Syracuse, N. Y.—General Electric Co. said it has developed 12 new extremely fast transistors. The new switching devices, all faster than standard mesa transistors, are available in production quantities. They range in price from \$1.08 to \$7.81 each in quantities of 100 to 999.

tinued purchase of the oil company's products.

The oil companies charge the same prices for lubricants used under an organized system as they do for those sold on the open market. However, these prices may be higher than some rock-bottom deals which a hard-driving P.A. can negotiate with smaller independents.

Oil companies offering the systems, however, maintain that an organized program can result in savings that add up to much more than the cost of the lubricants themselves. Mobil, for instance, claims its program saved Rockwell-Standard Corp. 43,907 machine production hours in a three-year period and cut downtime over 36%. Goodyear, the oil company says, increased hydraulic pump life 221% and saved over twice the cost of the lubricants, while Mosinee Paper Mills saved \$26,868 in maintenance costs.

Emphasizing the growing importance of systems selling is a move by computer companies and equipment manufacturers to pool their resources to provide more comprehensive and complex control systems. Typical of the new groupings is the mutual support agreement between IBM, Allis-Chalmers Mfg. Co. and Consolidated Systems Corp. Similar agreements also have been reached between TRW Computers on the one hand and Republic Flow Meters, a division of Rockwell Mfg. Co., and the

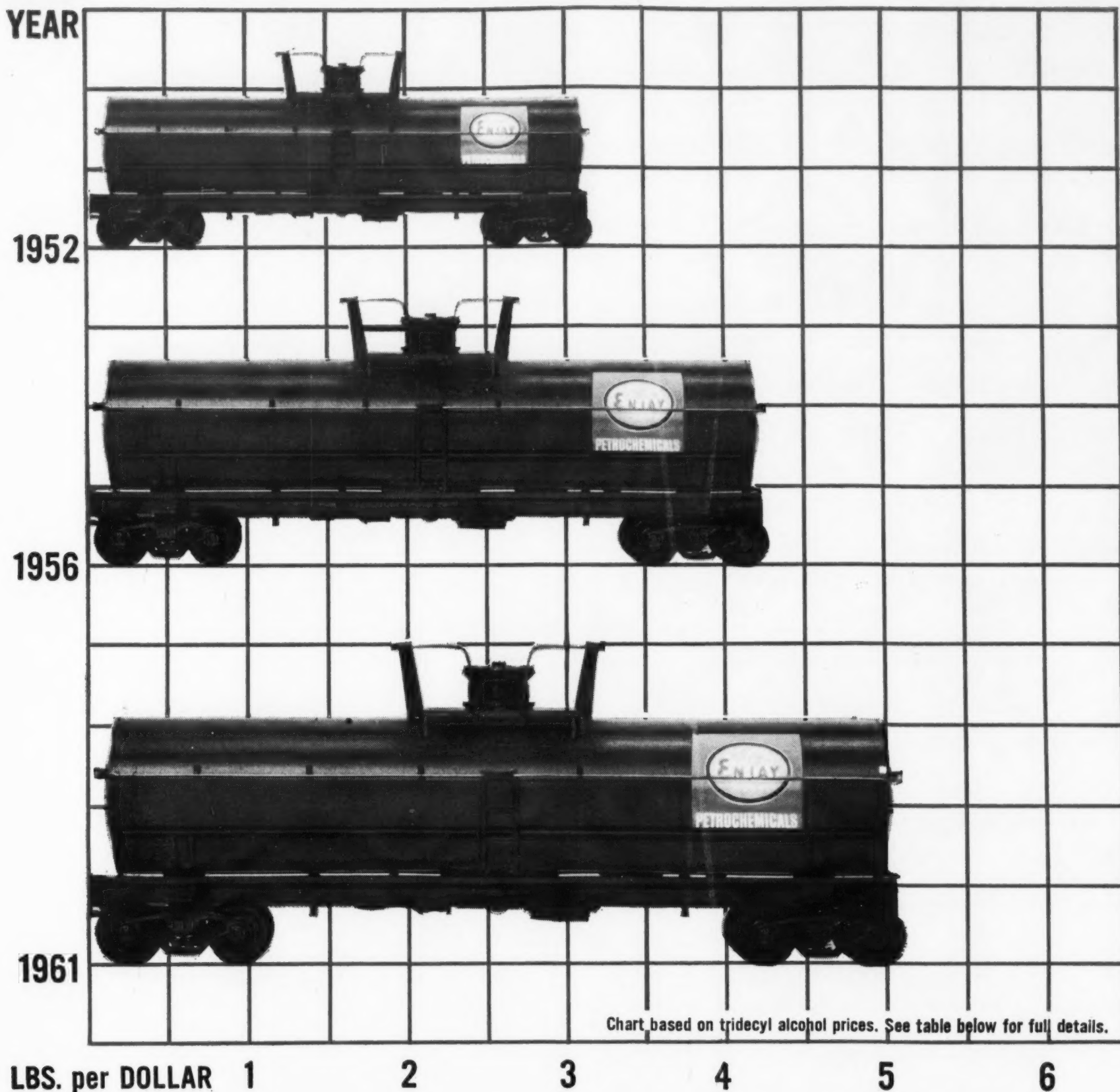
Swartwout Div. of Crane Co. on the other.

These agreements are quite informal. They provide simply for the exchange of technical information so that when a customer asks for a coordinated system the companies will be prepared to provide one. The agreements do not require that the companies in question work with each other, nor do they bar the participant from working with other firms.

A typical integrated system would include basic industrial equipment built by Allis-Chalmers; Consolidated System's special instrumentation for measuring temperature, flow, density, etc., and IBM's data processing equipment.

"The main advantage of buying such a package is not so much economic as technical," according to Robert J. Nelson, New York district manager of TRW Computers. "It requires a tremendous amount of engineering know-how to assemble such a package; more than any single buyer is likely to have available."

"Customers who aren't accustomed to buying engineering may balk at buying a total system. If it is a simple one, the customer may save some money by purchasing individual components and putting it together himself. But if it is complex, the P.A. who tries to avoid systems buying runs the risk of wasting money on hardware which he doesn't need or won't work," Nelson said.



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DECYL (lbs.)	3.6	4.8	5.6
TRIDECYL (lbs.)	3.1	4.2	5.0

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